

Owner's Manual

- Installation
- Use
- Maintenance











GENERAL PUMP

A member of the Interpump Group

TR26/30/32/36-SR26/30/32/36

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1. INTRODUCTION

This manual describes the use and maintenance instructions of the TR/SR Series pump, and should be carefully read and understood before using the pump.

Correct use and adequate maintenance will guarantee the pumps trouble-free operation for a long time. General Pump declines any responsibility for damage caused by misuse or the non-observance of the instructions indicated in this manual.

Upon receiving the pump, check that it is complete and in perfect condition. Should anything be found out of order, please contact us before installing and starting the pump.

2. SYMBOL DESCRIPTIONS



WarningPotential Danger



Read carefully and understand the manual before operating the pump



Danger High Voltage



Danger Wear protective mask



Danger Wear goggles



DangerWear protective gloves



Danger Wear protective boots



Danger Protect against explosion

Ref 310054 Rev. A 07-17

3. SAFETY

3.1 General Safety Indications

Improper use of pumps and high pressure systems, and the non-compliance with installation and maintenance instructions may cause severe injury to people and/or damage to property. Anyone assembling or using high pressure systems must possess the necessary competence to do so, should be aware of the characteristics of the components assembled/used, and must take all precautions necessary to ensure maximum safety in any operating condition. In the interest of safety, both for the Installer and the Operator, no reasonably applicable precaution should be omitted.

3.2 High pressure unit safety requirements

- 1. The pressure line must always be equipped with a safety valve.
- 2. High pressure system components, in particular for those units working outside, must be adequately protected against rain, frost and heat.
- 3. The electrical control system must be adequately protected from water spray, and must comply with the specific regulations in force.
- 4. High pressure hoses must be properly sized for maximum operating pressure of the system and always and only used within the operating pressure range specified by the hose manufacturer. The same rules should be observed for all other auxiliary systems affected by high pressure.
- 5. The ends of high pressure hoses must be sheathed and secured to a solid structure to prevent dangerous whiplash in case of bursting or broken connections.
- 6. Appropriate safety guards must be provided for the pump transmission systems (couplings, pulleys and belts, auxiliary drives).



3.3 Safety During Operation

The working area of a high pressure system must be clearly marked. Access must be prohibited to un-authorized personnel and, wherever possible, the area should restricted or fenced. The personnel authorized to access this area should first be trained, and informed about the risks that may arise from failures or malfunctions of the high pressure unit.

Before starting the unit, the operator must check:

- 1. That the high pressure system is properly powered (see paragraph 9.4).
- 2. That pump intake filters are perfectly clean; we advise the use of a device that indicates the filters clogging level.
- 3. Electrical parts are adequately protected and in perfect condition.
- 4. The high pressure hoses do not show apparent signs of abrasion, and that fittings are in perfect shape.

Any fault or reasonable doubt that may arise before or during operation should be promptly reported and verified by competent personnel. In these cases, pressure should immediately be released and the high pressure system stopped.







3.4 General Procedures For Using Nozzles/Lances

- 1. The Operator must always place his own and other worker's safety before any other interest; his and should always be governed by good sense and responsibility.
- 2. The Operator must always wear a helmet with a protective visor, waterproof clothing, and appropriate boots capable of guaranteeing grip on wet pavement.

Note: appropriate clothing will effectively protect against water spray, but it may not offer adequate protection against the direct impact of water jets or sprays from a close distance. Some circumstances may require further protection.

- 3. It is generally best to organize personnel into teams of at least two people capable of giving mutual and immediate assistance in case of necessity and of taking turns during long and demanding operation.
- 4. Access to the work area that is within the water jets' range must be absolutely prohibited to and free from objects that, inadvertently under a pressure jet, can be damaged and or create dangerous situations.
- 5. The water jet must only and always be directed in the direction of the work area, including during testing or preliminary tests or checks..
- 6. The Operator must always pay attention to the trajectory of the debris removed by the water jet. If necessary, suitable guards must be provided by the Operator to protect anything that may be accidentally exposed.
- 7. The Operator should not be distracted for any reason during operation. Workers needing to access the operating area must wait for the Operator to stop work, and then immediately make their presence known.
- 8. For safety reasons, it is important that each member of the team is fully aware of the intentions and actions of other team members in order to avoid dangerous misunderstandings.
- 9. The high pressure system must not be started up and run under pressure without all team members in position and without the Operator having already directed his/her lance toward the work area.

3.5 Safety During System Maintenance

- 1. The pressure system maintenance must be carried out in the time intervals set by the manufacturer who is responsible for the whole group according to law.
- 2. Maintenance should always be carried out by trained and authorized personnel.
- 3. Assembly and disassembly of the pump and its various components must be performed exclusively by authorized personnel, using appropriate equipment in order to avoid damage to components and connections.
- 4. Always use original spare parts to ensure total reliability and safety.

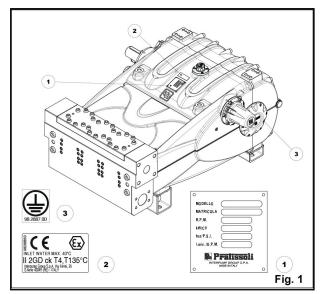
4. PUMP IDENTIFICATION

Each pump has a specific label which contains:

Pump model and version Serial Number Flow Rate - GPM Pressure - PSI Power - Hp-kW Maximum RPM



Pump model, version and serial number must always be specified when ordering spare parts.



5. TECHNICAL FEATURES @ 520 RPM

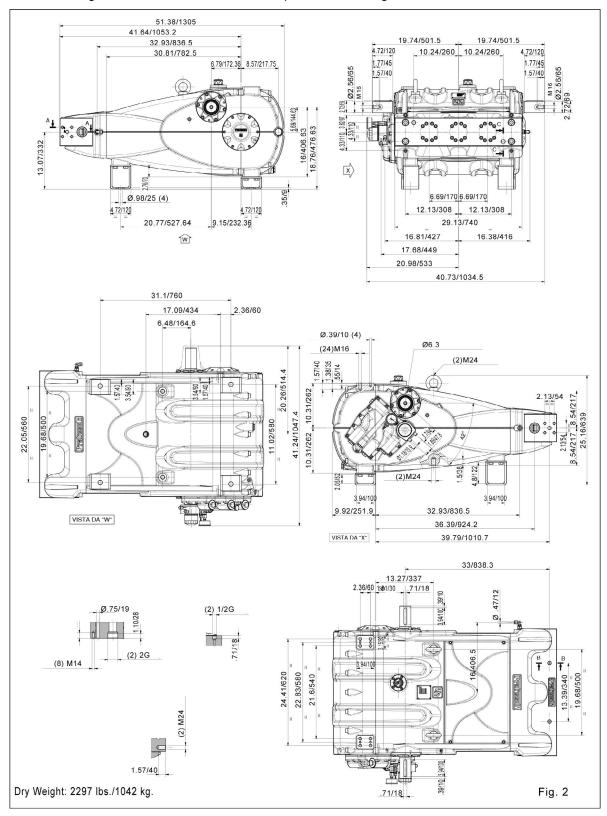
MODEL	DDM	FLOW	FLOW RATE PRE		SURE	POV	POWER	
MODEL	RPM	GPM	l/min	PSI	Bar	Нр	kW	
	1500							
SR26	1800	20	74.5	4.5 21,750	50 1,500	290	213	
	2200							
	1500	26	99	17,400	1,200	309		
SR30	1800						227	
	2200							
	1500							
SR32	1800	30	30 113	14,500 1,000	1,000	293.5	216	
	2200							
·	1500					297		
SR36	1800	38	143	11,600	11,600 800		218	
	2200							

MODEL	DD14	FLOW	FLOW RATE P		SURE	POWER	
MODEL	RPM	GPM	l/min	PSI	Bar	Нр	kW
	1500		108		1,500	427	
TR26	1800	29		21,750			309
	2200						
	1500	38	143	17,400	1,200	446	328
TR30	1800						
	2200						
	1500	43					
TR32	1800		43	163	14,500	1,000	426
	2200						
	1500						
TR36	1800 54 206	206	11,600	800	428	315	
	2200						

5.1

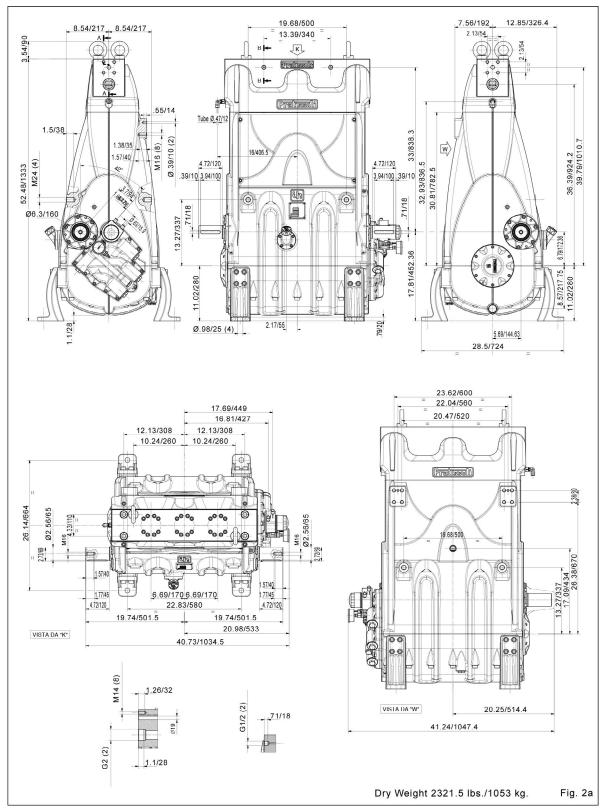
Pump Moments of Inertia Reduced at the PTO				
Pump Series	RPM	J(kg mm²)		
	1500	231300		
SR	1800	182100		
	2200	140600		
	1500	240800		
TR	1800	188800		
	2200	145000		

For dimensions and weight of SR Series HORIZONTAL, please refer to fig. 2.



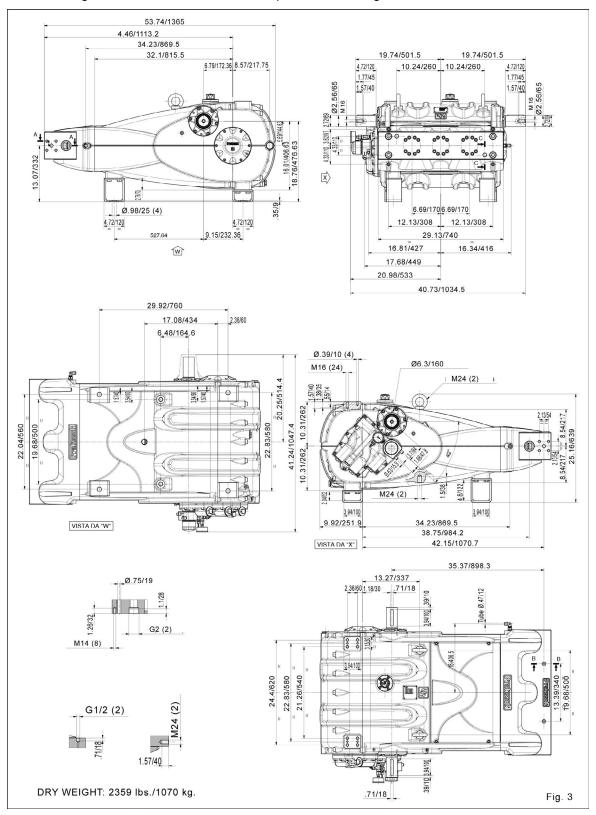
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For dimensions and weight of SR Series VERTICAL, please refer to fig. 2a.



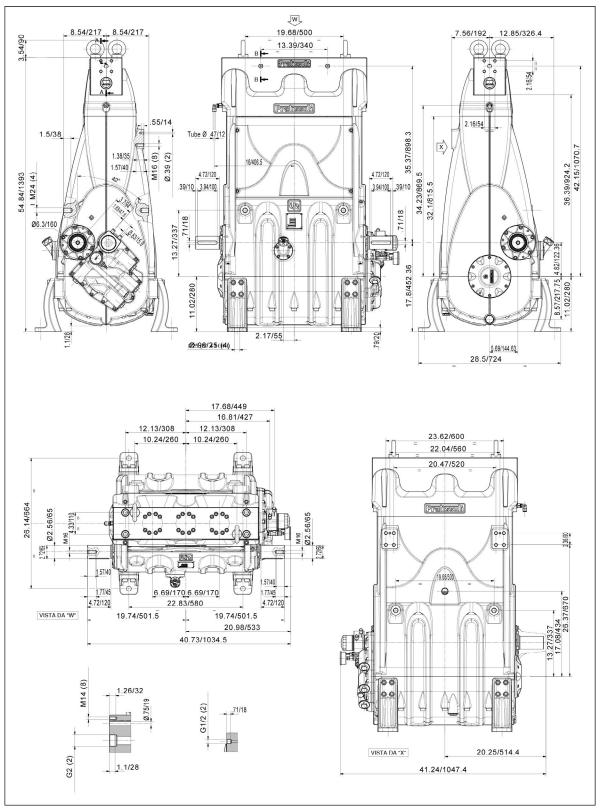
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For dimensions and weight of TR Series HORIZONTAL, please refer to fig. 3.



Ref 310054 Rev. A 07-17

For dimensions and weight of TR Series VERTICAL, please refer to fig. 3a.



Ref 310054 Rev. A 07-17

7. OPERATING INSTRUCTIONS



The TR/SR pumps are designed to operate with filtered water (see paragraph 9.7), in environments that are not potentially explosive.

Other fluids may be used only upon the approval of The Customer Service Department .



7.1 Water Temperature

The max water temperature is 860 F (300 C).

7.2 Max Flow Rate and Pressure Values

The performance values indicated in the catalog refer to the maximum performance of the pump. Regardless of the power used, pressure and maximum RPM values indicated on the plate may not be exceeded unless expressly authorized by the **Customer Service Department**.

7.3 Lowest RPM

The minimum speed allowed for these pumps is 250 RPM at the crankshaft. Any RPM value different from what is indicated in the performance table (see chapter 5) must be expressly authorized by the **Customer Service Department**.

7.4 Recommended Lubricant Oil Types & Manufacturers

The pump is delivered with lubricant oil compliant with room temperatures ranging between 14° and 104° F (- 10° and 40° C). Some recommended lubricant types are indicated in the table below; these lubricants are treated with additives in order to increase corrosion protection and resistance to fatigue. As an alternative, Automotive SAE 85W-90 gearing lubricants may also be used.

BRAND	TYPE
GENERAL PUMP	SERIES 220
ARAL	Aral Degol BG220
BP	ENERGOL HLP 220
CASTROL	Hyspin VG 220, Magna 220
ELF	POLYTELIS 220
ESSO	NUTO 220
FINA	Cirkan 220
FUCHS	RENOLIN 220
MOBIL	DTE OIL BB
SHELL	TELLUS C 220
TEXACO	RANDO HD 220
TOTAL	CORTIS 220

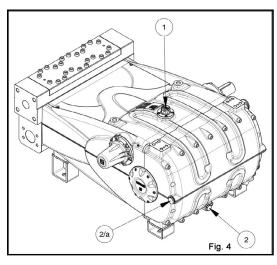


In any case, oil must be changed at least once a year since it may deteriorate by oxidation.

Used oil must be disposed of properly.

Check the oil level by using the oil level dipstick (1), fig. 4. Refill if necessary to top off level. Correct oil level inspection is done with the pump at room temperature; oil is changed with the pump at working temperature, by removing the plug (2), fig. 4. Use the plug (2a) for the vertical position.

Checking and changing oil is to be carried out as indicated in the table in fig. 14, Chapter 11. The amount required is 13.7 gallons (52 liters) for horizontal versions, and 9.7 gallons (37 liters) for vertical versions.



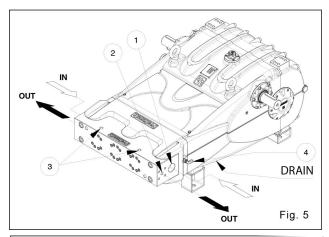
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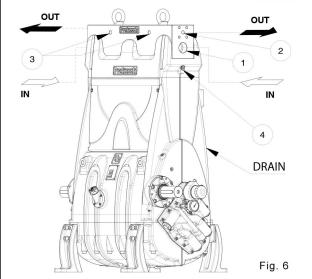
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8. PORTS AND CONNECTIONS

SR-TR Series pumps are equipped with (see fig. 5 and fig. 6):

- 2 inlet ports "IN", SAE G2"
 Line connection to any of the two ports is indifferent for proper pump functioning. The unused ports must be sealed off.
- 2. 2 Ø75"/19mm outlet ports "OUT", Outlet flanges
- 3. 2 service ports 1/2" Gas, can be used for the pressure gauge and the safety valve
- 4. 2 interchangeable ports of which one supplies closed and the other with an adjustable 90° rapid fitting for hoses. This line is used to recover the fluid drained from the packing cooling circuit, and must be connected to the drain port being careful to avoid counterpressure.
- 5. 1 drain port, with G1" hole in the bottom of the cover to monitor any leakage of water due to preassure seals wear. If you find evidence of leaks, refer to the repair manual. The port must always remain open and may be connected to a detection system if required.



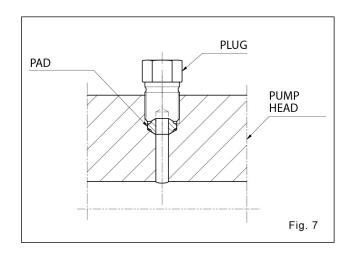


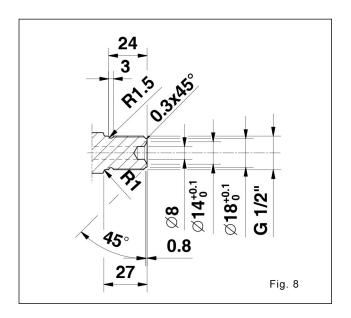
8.1 Conical sealing pads.

SR-TR pumps are equipped with 4 conical steel pads to be used in correspondence with the pump's outlet ports (see fig. 7) or in the optional fitting flanges. The function of the pads is to guarantee pressuretightness of the connection. The seat of the pump's outlet port is already machined in order to hold the conical pad; if it is necessary to make the connection for the outlet fitting or the closing plug, the connections must be specially machined as shown in fig. 8.



At each disassembly, the conic pads must be replaced.

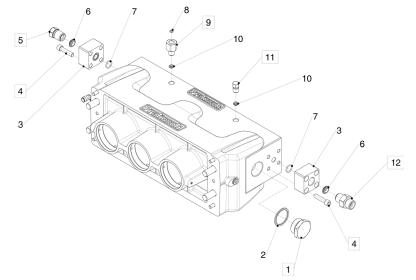




8.1 Inlet and Outlet Layout Diagram

Pos	P/N	Description	QTY
1	F98244600	Plug, G 2x25, Inox	1
2	F93197700		1
3	F65214566	Flange, G1"	2
4	F99486200	Screw, TCEI M14x60	8
5	F36023256	Plug, G1"	1
6	F36274866		2
7	F90404500	O-ring, Ø24.99x3.53	2
8	680081		1
9	680038		1
10	F93174000		2
11	680089	Plug, G1/2"	1
12	F36023166	Nipple, M-M, G1-M24x1.5	1
12	F36023066	Nipple, M-M, G1-M36x2	1

TORQUE SPECS				
POS.	FT. LBS	NM		
1	73.8	100		
4	154.9	210		
5	280.3	380		
9	88.5	120		
11	88.5	120		
12	280.3	380		



9. PUMP INSTALLATION

9.1 Installation

The fixing hole on the feet are approx. 1" (25 mm) in diameter. The base must be perfectly flat and rigid enough as not to allow bending or misalignment on the pump coupling axis/transmission due to torque transmitted during operation. There are 4 M24 holes on the pump to accept lifting eyebolts to facilitate installation of the unit, as shown in the figures below.



The eyebolts are sized for lifting the pump only and must never be used to handle additional loads.







Remove the oil filler plug located on the cover and replace it with the oil level dipstick. The dipstick must always be accessible.



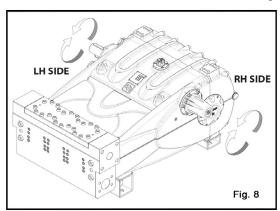
The pump's shaft (PTO) must not be rigidly connected to the motor unit.

The following transmission types are suggested:

- · Flexible coupling
- Universal joint (comply with the maximum working angles recommended by the manufacturer).

9.2 Direction of rotation

The rotation direction can be clockwise or counter-clockwise either on the left or right side (see fig. 8).



Drive can be connected to the pump on either side; on the **LEFT SIDE** pay attention to the protrusion of the lube pump. The end cover must be fitted over the unused PTO.

9.3 Hydraulic Connections

In order to isolate the circuit from the vibrations produced by the pump the first section of the hose adjoining the pump (both inlet and outlet) must be flexible. The inlet hose must be sufficiently rigid to prevent deformation due to pressure exerted by the action of the pump.

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9.4 Pump Supply

SR-TR pumps must always be installed with a pressure supply delivered by a booster pump. The booster pump must have at least twice the flow rate of the rated flow rate of the plunger pump and minimum pressure of 72.5 PSI (5 bar). These supply conditions must be observed at all operating speeds.



The booster pump must always be started before the plunger pump. It is advisable to install a pressure switch on the supply line downstream of the filters protecting the pump.

9.5 Suction Line

For the pump's correct operation, the suction line must have the following characteristics:

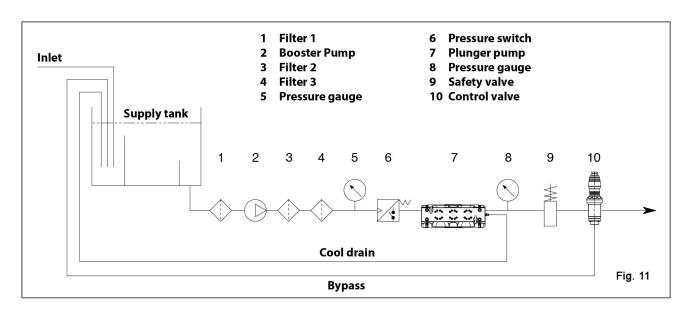
1. Minimum internal diameter as indicated in the diagram in paragraph 9.8, and in any case equal or greater than the pump head's value. Along the duct, avoid localized diameter reductions that may cause pressure drops with subsequent cavitation. **Absolutely avoid 90º elbows**, connections with other hoses, bottlenecks, counter-slopes, upside down "U" shaped curves, "T" connections.

- 2. With a layout that is set in such a way to prevent cavitation.
- 3. It should be perfectly airtight, and built in a way that guarantees perfect sealing over time.
- 4. Avoid pump emptying when stopping (even partial emptying).
- 5. Do not use hydraulic fittings, 3 or 4 way fittings, adapters, etc., since they may hinder the pump's performance.
- 6. Do not install Venturi tubes or injectors for detergent intake.
- 7. Avoid the use of standing valves, check valves, or any other type of one-way valves.
- 8. Do not connect the by-pass line from the valve directly to the pump suction line.
- 9. Provide appropriate baffle plates inside the tank in order to avoid water flows coming from both the by-pass and feeding which lines may create turbulence near the tank's outlet port.
- 10. Make sure that the suction line is perfectly clean inside before connecting it to the pump.
- 11. Install the pressure gauge for checking the booster pressure near the plunger pump suction port and always downstream from the filters.

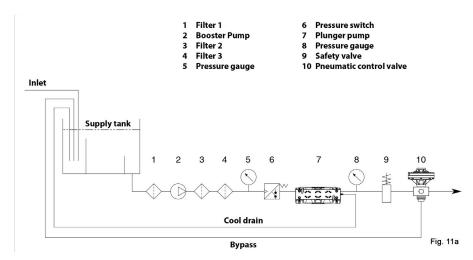
9.6 Filtering

Three filters must be installed on the pump suction line, positioned as indicated in Fig. 11 and 11a.

With the manual adjustment valve:



With pneumatic control valve



The filter must be installed as close as possible to the pump, should allow easy inspection and have the following characteristics:

- 1. Minimum capacity 3 times greater than the pump's rated flow value.
- 2. Filter port diameters must not be smaller than the pump inlet ports.
- 3. Filtration degree ranging between 200 and 360 µm.



In order to guarantee correct pump operation, it is important to plan periodical cleaning of the filter depending on actual pump usage, water quality and actual clogging conditions.

9.7 Outlet Line

To obtain a correct delivery line, please comply with the following installation instructions:

- 1. The internal diameter of the hose must allow to guarantee correct fluid speed; see digram in paragraph 9.9
- 2. The first section of the hose connected to the pump must be flexible in order to isolate pump vibrations from the rest of the system.
- 3. Use high pressure hoses and fittings that guarantee wide safety margins in any working condition.
- 4. Install a safety valve on the delivery line.
- 5. Use pressure switches suitable for the pulsating loads typical of plunger pumps.
- 6. In the design phase, take into proper account the pressure drop along the line, since this causes a reduction in usage pressure with respect to the value measured at the pump.
- 7. If the pump pulsations are harmful for particular applications, install an appropriately sized pulsation dampener on the outlet line.

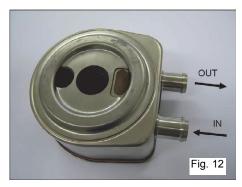
9.8 Internal Hose Diameters

The following table show the internal diameter values for the suction and outlet hoses.

	SR PUMPS				
MODEL	SUCTION	OUTLET			
SR26					
SR30	G2"	G1"			
SR32		M24x1.5 M26x2			
SR26					

	TR PUMPS				
MODEL	SUCTION	OUTLET			
TR26					
TR30	G2"	G1"			
TR32		M24x1.5 M26x2			
TR36					

9.9 Water/Oil Heat Exchanger Connection



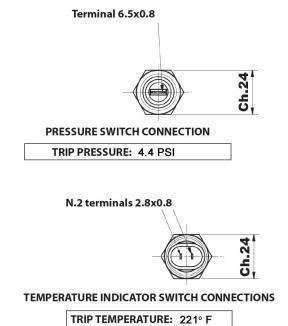
For optimal performance connect the exchanger in the reverse flow direction (see fig. 10). Water flow rate:

- a) Maximum efficiency 6.6 GPM (25 LPM)
- b) Medium efficiency 5.3 GPM (20 LPM)
- c) Minimum efficiency 3.2 GPM (12 LPM)

If the pump operates in ambient temperatures below 41° F (5° C) the heat exchanger is not essential. Refer to Section 11 for maintenance information

9.10 Lube Pump Assembly

- 1) Oil filter cartridge to be hand-tightened. Refer to chapter 11 for maintenance information.
- 2) 0 232 PSI pressure gauge for periodic lube oil pressure checks
- 3) Pressure switch: NORMALLY OPEN (normally closed on request); 12V. For stationary units it is good practice to connect the pressure switch via a protection system.
- 4) Oil thermostat: NORMALLY CLOSED; 12V.



10. START-UP AND OPERATION

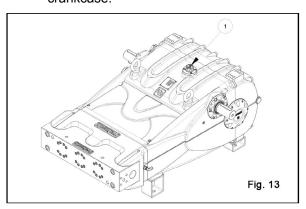
10.1 Preliminary Inspections

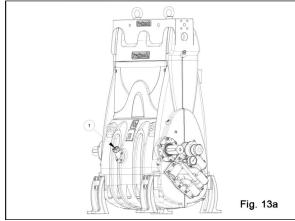
Before Start-up Be sure that:



The suction line is connected and up to pressure (see Chapter 9) the pump must never run dry.

- 1. The suction line must be perfectly airtight.
- 2. All the On-Off valves between the pump and the feeding source are completely open. The delivery line must discharge freely in order to allow the air in the pump to be expulsed easily, thus facilitating pump priming.
- 3. All suction/delivery connections and fittings must be correctly tightened.
- 4. Coupling tolerances on the pump/transmission axis (half-joint misalignment, angle of universal joint, etc.) must remain within the limits indicated by the transmission Manufacturer.
- 5. The pump's oil level must be verified using the correct dipsticks (position 1, fig 11 and 11a) on the top of the crankcase.







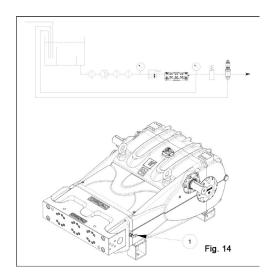
In case the pump has not run for a long period of time, make sure the suction and outlet valves are functioning correctly.

10.2 Start-up

- 1. The pump must be started off-load.
- 2. Verify correct feeding pressure.
- 3. During operation, check that the rotating speed does not exceed the rated value.
- 4. Before putting the pump under pressure let it run for at least 3 minutes.
- 5. Before stopping the pump, release the pressure using the control valve or any pressure relieving device and reduce to a minimum RPM.

10.3 Start-up

During operation, a certain amount of water coming from the seal packing cooling unit is discharged from the Port 1 (fig. 14). The draining of this circuit must be sent back to the suction line before the booster pump (fig. 14), or to a tank for collection.



11. PREVENTIVE MAINTENANCE

To guarantee pump reliability and efficiency, comply with the maintenance intervals as indicated in the table below.

PREVENTIVE MAINTENANCE			
EVERY 1000 HOURS	EVERY 1500 HOURS	EVERY 3000 HOURS	
Check oil level			
	Check / Replace:*	Oil and oil filter change Bellows Replacement (vertical versions)	
	Check / Replace:		

11.1 Bellows (SR-TR vertical versions)

Check that the bellows fastening clamps are properly tightened after the first **1,000** hours of operation. **Replace the bellows every 3,000 hours of operation.** To replace, follow the instructions given in the **repair manual**.

11.2 Water/oil heat exchanger

The heat exchanger cleaning intervals must be established on the basis of the water hardness of the application. It is good practice to clean the exchanger every 2,000 hours if water hardness is $\leq 30^{\circ}$ f; every 1,000 hours for hardness > 30° f and $\leq 40^{\circ}$ f. Above 40° f water hardness the exchanger should be cleaned every 500 hours. Flush the exchanger using commercial antiscale products; it is not necessary to dismantle the unit. NOTE: the heat exchanger is constructed of **Stainless Steel**.

^{*} For replacement follow instructions contained in the repair manual.

12. PUMP STORAGE

12.1 Long-term Inactivity

If the pump is started for the first time after a long period from the date of shipment, before operation, check the oil level, inspect the valves as specified in Chapter 10, then follow described star-up procedures.

12.1 Filling the Pump With An Anti-Corrosion Emulsion or Anti-freeze By Using An External Diaphragm Pump As In The Layout Shown in Paragraph 9.7.

- In place of the service tank, use a suitable container containing the solution to be pumped.
- Close the filter drainage, if open.
- Make sure that the hoses to be used are clean inside and spread grease on their connections.
- Connect the high pressure exhaust hose to the pump
- Connect the suction hose to the diaphragm pump
- Connect the suction hose between the pump head and the diaphragm pump.
- Fill the service container with solution.
- Insert the free ends of the suction hose and the high pressure exhaust hose inside the container.
- Switch on the diaphragm pump.
- Pump the solution until it exits from the high pressure hose.
- · Continue pumping for at least another minute.
- · Stop the pump and remove the previously connected hoses.
- Clean, grease and plug the connections on the pump head.

12.2 Hoses

- a) Before greasing and protecting hoses according to previously described procedure, dry connections with compressed air.
- b) Cover with polyethylene
- c) Do not wrap too tightly; ensure that there are no folds.

13. PRECAUTIONS AGAINST FREEZING



In areas and periods of the year where there is risk of freezing, follow the instructions indicated in Chapter 12.



In the presence of ice, in no case must the pump be started until the entire circuit has been completely thawed out; not complying with this indication may cause serious damage to the pump.

14. WARRANTY TERMS

The pump is guaranteed for a period of 5 years from the delivery date, with the exception of parts subject to wear. In any case, please refer to the contract terms for other warranty conditions. The warranty is void if:

- a) The pump has been used for purposes that differ from that agreed.
- b) The pump has been fit with an electric or diesel engine with performance greater than that indicated in the table.
- c) The required safety devices were un-adjusted or disconnected.
- d) The pump was used with accessories or spare parts not supplied by General Pump.
- e) Damage was caused by:
 - 1) improper use
 - 2) the non-observance of maintenance instructions
 - 3) use not compliant with operating instructions
 - 4) insufficient flow rate
 - 5) faulty installation
 - 6) incorrect positioning or sizing of the hoses
 - 7) non-authorized design changes
 - 8) cavitation

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15. TROUBLESHOOTING



The pump does not produce any noise at start-up:

- The pump is not primed and is running dry
- There is no water in the inlet line
- The valves are blocked
- The delivery line is closed and does not allow the air in the pump to be discharged



The pump pulses irregularly (knocking):

- Air suction
- Insufficient feeding
- Bends, elbows, fittings along the suction line obstruct the fluid's passage
- The inlet filter is dirty or too small
- The booster pump, where provided, supplies insufficient pressure or flow rate
- The pump is not primed due to insufficient head or the delivery line is closed during priming
- The pump is not primed due to valve seizing
- Worn valves
- Worn pressure packings
- Incorrect operation of the pressure adjustment valve
- Transmission problems



The pump does not deliver the rated flow / is noisy:

- Insufficient feeding (see the causes listed above)
- RPM are less than the rated flow



- Excessive amount of water by-passed by the pressure adjustment valve
- Worn valves
- Leakage from the pressure packings
- Cavitation due to:
 - 1) Wrong sizing of the suction hose/ undersized diameters
 - 2) Insufficient flow rate
 - 3) High water temperature



Insufficient pump pressure:

- The nozzle (or has become)too large
- Insufficient RPM
- Leakage from the pressure packings
- Incorrect operation of the pressure adjustment valve
- Worn valves



Overheated pump:

- The pump is overloaded (pressure or RPM exceed the rated values)
- Oil level is too low, or the oil is not of a suitable type, indicated in Chapter 7 (see paragraph 7.4)
- Incorrect alignment of the joint or pulleys
- Excessive inclination of the pump during operation

Pump vibrations or knocking:

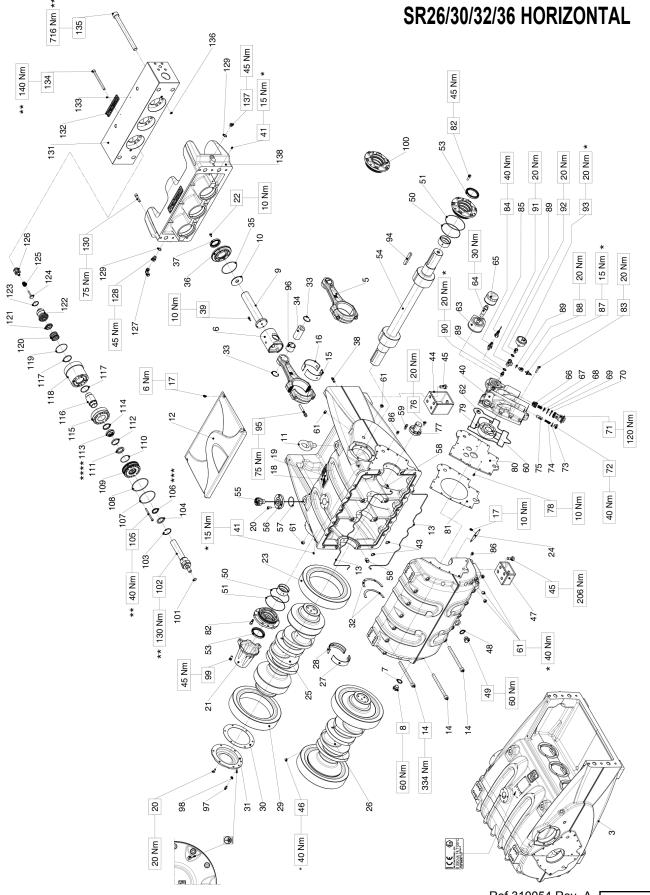
- Air suction
- Incorrect operation of the pressure adjustment valve
- Valve malfunction
- Irregular drive transmission motion

15. TROUBLESHOOTING (cont.)

FAULT	POSSIBLE CAUSE	CORRECTIVE ACTION
No noise from pump at start-up	No water at inlet. Valves jammed. Outline is closed and thus prevents the release of air trapped in the pump manifold.	Check booster pump operation and flow rate. Check operation of the valves. Check for possible problems on the outlet line.
Insufficient pressure	Leaks from pressure control valve or incorrect pressure setting. Defective set of valve seats. Suction or discharge valves damaged. Leaks from manifold.	Identify leaks and repair. Repair leaks or restore pressure setting Fit new seals Renew suction and discharge valves. Check condition of valve springs. Check manifold seals and replace if necessary; fit new manifold
Excess pump running noise	Worn valves. Undersized suction hoses and/or filters. Insufficient flow rate, high water temperature, clogged filter.	Check installation and components on suction line; measure water temperature.
Irregular hammering of hoses.	Air suction and/or insufficient water supply. Bends, elbows, and fittings on the suction line are choking the passage of liquid. Supply filter is clogged or undersized. Booster pump supplies insufficient pressure and/or flow rate.	Check installation and components on suction line. Check booster pump operation and flow rate. Clean or replace supply filter.
Water leak from gaskets supports	Low pressure gasket defective/worn.	Replace low pressure gasket.
Pump overheats	Pump pressure and/or speed are higher than rated pressure/speed. Low oil level in pump crankcase or oil not recommended type. Coupling or driveline not aligned.	Restore correct pressure and/or speed. Top up oil level; change oil if necessary. Check transmission.
Oil leaks from pump crankcase	Piston guide rod oil seal defective/worn. Various crankcase gaskets defective/worn. For vertical versions check condition of bellows.	Replace oil seal, bellows and gaskets.
Emulsified oil ejected from breather. Oil dipstick shows signs of emulsion.	Lube oil contaminated with pumped liquid.	Check correct operation of piston guide oil seals (or of bellows) and change lube oil

SR26/30/32/30-Horizontal

16.1 EXPLODED VIEW AND PARTS LIST



SR26/30/32/36-Horizontal

Item	Part #	Description	QTY.
3	F65010801	Crankcase	1
5	F65030601	Connecting Rod	3
6	F79050043	Piston Guide	3
	F79050243	Piston Guide, ± 1.0	
7	F93198000	Washer, Seal, Ø 3/4"	1
8	F98226500	Plug, G 3/4" x16	1
9	F65050566	Piston Guide Stem	3
10	F65210566	Splashguard	3
11	F93108000	Eyebolt	3
12	F65150853	Upper Crankcase Cover	1
13	F65214082	Seal, Ø 3.53x530	2
14	F99522400	Screw, M16x200	22
	F90932300	Upper Babbitt	
15	F90932400	Upper babbitt, +0.25	3
	F90932500	Upper babbitt, +0.50	
	F90932000	Lower Babbitt	
16	F90932100	Lower Babbitt, +0.25	3
	F90932200	Lower Babbitt, +0.50	
17	F99182000	Screw, M6x12	8
18	F91570000	Rivet, Ø 2.5x5	4
19	F97826800	Pump Plate	1
20	F99305900	Screw, M8x20	10
21	F65150920	Crankshaft End Cover	1
22	F99185300	Screw, M6x16	6
	F10081555	Gear, SX Z81 R 2.90, Helical	
23	F10081755	Gear, SX Z83 R 3.46, Helical	1
	F10081955	Gear, SX Z89 R 4.23, Helical	
24	F65210874	Oil Filter	1
25	F65020555	Crankshaft Elbow	1
	F65020701	Bearing, C: 90, R: 2.90	
26	F65020801	Bearing, C: 90, R:3.46	1
	F65020901	Bearing, C: 90, R:4.23	
	F90935000	Upper Bushing	
27	F90935100	Upper Bushing, +0.254	4
	F90935200	Upper Bushing, +0.5.8	
	F90934700	Lower Bushing	
28	F90934800	Lower Bushing, +0.254	4
	F90934900	Lower Bushing, +0.508	
	F10081455	Gear, DX Z81 R 2.90, Helical	
29	F10081655	Gear, DX Z83 R. 3.43, Helical	1
	F10081855	Gear, DX Z89 R. 4.23, Helical	
30	F65210984	Front Cover Seal	1
31	F65150620	Crankshaft Cover	1
32	F90935300	Half ring	2
33	F90075500	Ring, Seeger, Ø 45	6
34	F97747000	Pin, Ø 45x86	3
35	F90392000	O-ring, Pin, Ø 101.27x2.62	3
36	F79210022	Piston Guide Seal Cover	3
37	F90171500	Ring, Rad, Ø 50x70x10/11.5	3
38	F97630000	Pin, Ø 12x40	2
39	F99189700	Screw, M6x24	12
40	F79212420	Pump Oil Body	1
41	F98193000	Plug, Conical, M8x1	2
43	F90384500	O-ring, Ø 18.72x2.62	4
44	F65200602	Front Pump Feet	2
45	F99513300	Screw, M16x35	16
46	F99425000	Screw, M12x12	2
47	F65200502	Rear Pump Feet	2
48	F93198000	Washer, 3/4"	1
49	F98226500	Plug, 3/4"x16	1
50	F90392650	O-ring, Ø 126.67x2.62	2
51	F90380500	O-ring, Ø 132.00x2.50	2
53	F90190000	Ring, Rad. Ø 70x90x10	2
	F10081155	Pinion, Z28 R. 2.90, Helicol	
54	F10081255	Pinion, Z24 R. 3.46, Helicol	1
	F10081355	Pinion, Z21 R. 4.23, Helicol	1
55	F98234050	Oil Dipstick, 1"x343	1
56	F65211254	Oil Dipstick Support	1
57	F90389800	O-ring, Ø 56.82x2.62	1
			_
58	F79211689	Bushing	4
59	F91499500	Key, 12x8x40	1
60	F79211907	Oil Pump Rotor	1
61	F98215500	Plug, Conical, M20x1.5	6
62	F90385200	O-ring, Ø 22.22x2.62	6
63	F65213700	Exchanger, Water-Oil	1
_			

		OILEO/OU/OE/OU IIOIIEOI	. ca
Item	Part #	Description	QTY.
64	F65213864	Fitting, Oil Filter Exchanger	1
65	F92899000	Oil Filter, M20	1
66	F36200951	Inlet Valve Guide	4
67	F94744000	Spring,15.4x26.5	4
_	F36201076	Valve, Spherical	4
	90386500	O-ring, Ø 29.82x2.62	4
	F90387300	O-ring, Ø 36.14x2.62	4
_	F79213964	Valve Cage	4
72	F98213780	Plug, M18x11	1
73	F96741000	Washer, Ø 18.2x24x1.5	1
74	F94739000	Spring, 10.8x37.9	1
75	F79213664	Piston Valve, H.P.	1 4
	F99303900	Screw, M8x16	1
_	F79212654 F99185100	Control, Oil Pump Screw, M6x16	3
	F79212747	Oil Seal, Oil Pump	1
	F79212874	Plate, Oil Pump	1
	F79212984	Seal, Oil Pump Plate	1
	F99368600	Screw, M10x30	12
	F99311600	Screw, M8x40	15
84	F93510500	High Temperature Light	1
85	F93551500	Connector, High Temperature Light	1
86	F79213589	Bushing, Oil Pump	2
87	F93555500	Pressure Switch, 12V	1
88	F94513100	Connector, M-F, 1/4"-M10x1	1
89	F96723000	Washer, Ø 13.5x19x1.5	3
90	F95256000	Connector, M-M, NPT 1/4"-G1/4"	1
	F96310000	Connector, T, F-F-F, G1/4"	1
	F95256600	Nipple, M-F, G1/4"	1
	F94607000	Pressure Gauge	1
	F91505000	Key, 18x11x100	1
	F99441000	Screw, Connecting Rod	6
	F90918500	Bushing, Connecting Rod	3
97	F99301900	Screw, M8x10	3
	F96701750	Washer, Ø8.4x15x0.8	3
	F99365200 F65700501	Screw, M10x20	2
	F90359600	Cover, Pinion, PTP O-ring, Ø 18.77x1.78	3
101	F65041601	Plunger, complete Ø 26	3
	F65041701	Plunger, complete Ø 30	-
102	F65041801	Plunger, complete Ø 32	3
	F65041901	Plunger, complete Ø 36	1
	F90078000	Restop Ring, SR26, 30, 32	
103	90079700	Restop Ring, SR36	3
	F78211656	Packing, Ø 26	
404	F78211856	Packing, Ø 30	
104	F65217056	Packing, Ø 32	3
	F65217156	Packing, Ø 36	1
105	F99216100	Screw, M8x100	54
	F90274920	Packing, Ø 26x34x8.0, LP	
106	F90276300	Packing, Ø 30x38x6.0, LP, LP	3
100	F90278100	Packing, Ø 32x40x6.0, LP]
	F90280100	Packing, Ø 36x44x8.0, LP	
	F90414600	O-ring, Ø 4x3.53	3
108	F90414700	O-ring, Ø107.5x3.53	3
	F65216656	Support Seal, Ø 26, LP	
109	F65216756	Support Seal, Ø 30, LP	3
	F65216856	Support Seal, Ø 32, LP	
	F65216956	Support Seal, Ø 36, LP	
110	F90389300 F90390000	O-ring, Ø53.65x2.62, SR26, 30, 32 O-ring, Ø56.42x2.62, SR36	3
	F65216060	Bushing Seal, Ø 26	
	F78213660	Bushing Seal, Ø 30	
111		Bushing Seal, Ø 32	3
	F65216160 F65216260	Bushing Seal, Ø 36	
	F65215768	Anti-extrusion Ring, Ø 26	\vdash
	F78213068	Anti-extrusion Ring, Ø 26 Anti-extrusion Ring, Ø 30	
112	F65215868	Anti-extrusion Ring, Ø 30 Anti-extrusion Ring, Ø 32	3
	F65215968	Anti-extrusion Ring, Ø 30	
	F90274930	Packing, Ø 26x40x16.5, HP	\vdash
	F90274930 F90277800	Packing, Ø 30x46x17.8, HP	
113			3
	F90278900	Packing, Ø 32x46x16.4, HP Packing, Ø 36x52x18.4, HP	
	F90282500	F acking, 10 303023 10.4, FT	ш

SR26/30/32/36-Horizontal

Item	Part #	Description	QTY.
	F65215360	Head Ring, Ø 26	
114	F65215460	Head Ring, Ø 30	3
114	F65215560	Head Ring, Ø 32	3
	F65215660	Head Ring, Ø 36	
	F65216356	Support Seal, Ø 26, HP	
115	F65216456	Support Seal, Ø 30, 32, LP	3
	F65216556	Support Seal, Ø 36, LP	
	F65214982	Plunger Bushing, Ø 26	
116	F65215082	Plunger Bushing, Ø 30	3
110	F65215182	Plunger Bushing, Ø 32	3
	F65218282	Plunger Bushing, Ø 30	
	F93198760	Seal, Ø 40x45x3.95, SR26	
117	F93198950	Seal, Ø 46x51x3.95, SR30, 32	6
	F93199800	Seal, Ø 52x57x3.95, SR36	
	F65061056	Piston Sleeve, Ø 26	
118	F65061156	Piston Sleeve, Ø 30, 32	3
	F65061256	Piston Sleeve, Ø 36	
119	F90391450	O-ring, Ø 75.87x2.62	3
	F94767000	Spring, 36x51.7, SR26	
120	F94770800	Spring, 41.5x51.2, SR30, 32	3
	F94772300	Spring, 47.2x61.2, SR36	
	F36214656	Plate Valve, Ø 26	
121	F36214556	Plate Valve, Ø 30, 32	3
	F26214756	Plate Valve, Ø 36	
	F36214356	Valve Seat, Ø 26	
122	F36214256	Valve Seat, Ø 30, 32	3
	F36214456	Valve Seat, Ø 36	
123	F93198730	Seal, Ø 36x41x3.95	

ltem	Part #	Description	QTY.
124	F36208356	Valve Ø 20-22-24, SR26, 30, 32	3
124	F36208456	Valve, Ø 26-28-30, SR36]
125	F94747600	Spring, 18.0x35, SR26, 30, 32	3
125	F94748900	Spring, 18.9x35, SR36] 3
126	F36214160	Valve guide	3
127	F96416400	Fitting, 90 ^o , G3/8	1
128	F78214566	Fitting, Ø 3-3/8Mx3/8F	1
129	F96738000	Washer, Ø 17.5x23x1.5	2
130	F99433500	Screw, M12x50.59	4
131	F65120756	Manifold	1
132	F97827600	Label	1
133	F91570300	Rivet, Ø 2.5x8	2
134	F99449000	Screw, M12x160	24
135	F99537100	Screw, M24x2x300	4
136	F90382101	O-ring, Ø 9.19x2.62	2
137	F98208600	Plug, G3/8x12	1
138	F65214713	Manifold spacer, HP, SR	1

REPAIR KITS

KIT NUMBER	F2323 Plunger Packing Kit SR26	F2324 Plunger Packing Kit SR30	F2325 Plunger Packing Kit SR32	F2326 Plunger Packing Kit SR36
Positions	106, 107, 108, 110, 111,	106, 107, 108, 110, 111,	106, 107, 108, 110, 111,	106, 107, 108, 110, 111,
Included	112, 113, 117, 119, 136	112, 113, 117, 119, 136	112, 113, 117, 119, 136	112, 113, 117, 119, 136

KIT NUMBER	F2327 Valve Kit SR26	F2335 Valve Kit SR30 & SR32	F2336 Valve Kit SR36
Positions Included	117, 119, 123	117, 119, 123	117, 119, 123

KIT NUMBER	F2328 Inlet/Outlet Valve Kit SR26	F2329 Inlet/Outlet Valve Kit SR30 & SR32	F2330 Inlet/Outlet Valve Kit SR36
Positions	117, 119, 120, 121,	117, 119, 120, 121, 122,	117, 119, 120, 121,
Included	122, 123, 124, 125, 126	123, 124, 125, 126	122, 123, 124, 125, 126

KIT NUMBER	F2331 Complete Seals Kit SR26	F2332 Complete Seals Kit SR30	F2333 Complete Seals Kit SR32	F2334 Complete Seals Kit SR36
Positions Included	13, 30, 35, 37, 41, 50, 51, 53, 57, 62, 69, 70, 79, 81, 101, 106, 107, 108, 110, 111, 112, 113, 117, 119, 123, 136	13, 30, 35, 37, 41, 50, 51, 53, 57, 62, 69, 70, 79, 81, 101, 106, 107, 108, 110, 111, 112, 113, 117, 119, 123, 136	57, 62, 69, 70, 79, 81, 101,	

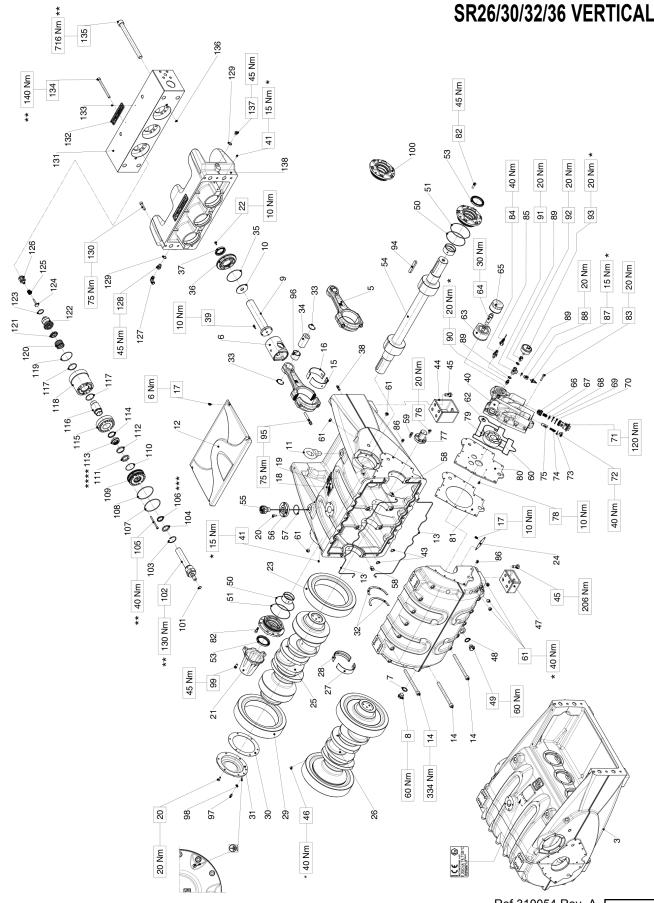
KIT NUMBER	F2265 Shaft Bushing Kit (Standard)	F2266 Shaft Bushing Kit (+0.25)	F2267 Shaft Bushing Kit (+0.50)
Positions Included	27, 28, 32	27, 28, 32	27, 28, 32

KIT NUMBER	F2186 Connecting Rod Bushing Kit (Standard)	F2187 Connecting Rod Bushing Kit (+0.25)	F2188 Connecting Rod Bushing Kit (+0.50)
Positions Included	15, 16	15, 16	15, 16

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16.2 EXPLODED VIEW AND PARTS LIST

SR26/30/32/36-Vertical SR26/30/32/36 VERTICAL



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Item	Part #	Description	QTY.
3	F65010801	Crankcase	1
5	F65030601	Connecting Rod	3
6	F79050043	Piston Guide	3
	F79050243	Piston Guide, ± 1.0	
7	F93198000	Washer, Seal, Ø 3/4"	1
8	F98226500	Plug, G 3/4" x16	1
9 10	F65050566	Piston Guide Stem	3
11	F90392000 F93108000	O-ring, Ø 101.27x2.62 Eyebolt	3
12	F65150853	Upper Crankcase Cover	1
13	F65214082	Seal, Ø 3.53x530	2
14	F99522400	Screw, M16x200	22
	F90932300	Upper Babbitt	
15	F90932400	Upper babbitt, +0.25	3
	F90932500	Upper babbitt, +0.50	
	F90932000	Lower Babbitt	
16	F90932100	Lower Babbitt, +0.25	3
47	F90932200	Lower Babbitt, +0.50	
17	F99182000	Screw, M6x12	8
18 19	F91570000 F97826800	Rivet, Ø 2.5x5	1
20	F99305900	Pump Plate Screw, M8x20	10
21	F65150920	Crankshaft End Cover	1
22	F99185300	Screw, M6x16	6
	F10081555	Gear, SX Z81 R 2.90, Helical	
23	F10081755	Gear, SX Z83 R 3.46, Helical	1 1
	F10081955	Gear, SX Z89 R 4.23, Helical	1
24	F65210874	Oil Filter	1
25	F65020555	Crankshaft Elbow	1
	F65020701	Bearing, C: 90, R: 2.90	
26	F65020801	Bearing, C: 90, R:3.46	1
	F65020901	Bearing, C: 90, R:4.23	
07	F90935000	Upper Bushing	١, ١
27	F90935100	Upper Bushing, +0.254	4
	F90935200 F90934700	Upper Bushing, +0.5.8 Lower Bushing	
28	F90934800	Lower Bushing, +0.254	4
20	F90934900	Lower Bushing, +0.508	"
	F10081455	Gear, DX Z81 R 2.90, Helical	
29	F10081655	Gear, DX Z83 R. 3.43, Helical	1 1
	F10081855	Gear, DX Z89 R. 4.23, Helical	1
30	F65210984	Front Cover Seal	1
31	F65150620	Crankshaft Cover	1
32	F90935300	Half ring	2
33	F90075500	Ring, Seeger, Ø 45	6
34	F97747000	Pin, Ø 45x86	3
35	F65210766	Flange for Bellows	3
36	F92811000	Clip, Ø 98-109	3
	F65211047	Bellows	3
38	F97630000 F99189700	Plug, Ø 12x40 Screw, M6x24	3 12
40	F79212420	Pump Oil Body	1
41			
	F98193000	Plug. Conical. M8x1	2
43	F98193000 F90384500	Plug, Conical, M8x1 O-ring, Ø 18.72x2.62	2
43		Plug, Conical, M8x1 O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69	-
_	F90384500	O-ring, Ø 18.72x2.62	4
44	F90384500 F92810000	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69	4 2
44 45	F90384500 F92810000 F99513300	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet	4 2 16
44 45 46 47 48	F90384500 F92810000 F99513300 F97623000 F65200702 F93198000	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4"	4 2 16 8 2
44 45 46 47 48 49	F90384500 F92810000 F99513300 F97623000 F65200702 F93198000 F98226500	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16	4 2 16 8 2 1
44 45 46 47 48 49 50	F90384500 F92810000 F99513300 F97623000 F65200702 F93198000 F98226500 F90392650	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62	4 2 16 8 2 1 1 2
44 45 46 47 48 49 50 51	F90384500 F92810000 F99513300 F97623000 F65200702 F93198000 F98226500 F90392650 F90380500	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50	4 2 16 8 2 1 1 2 2
44 45 46 47 48 49 50	F90384500 F92810000 F99513300 F97623000 F65200702 F93198000 F98226500 F90392650 F90380500 F90190000	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50 Ring, Rad. Ø 70x90x10	4 2 16 8 2 1 1 2
44 45 46 47 48 49 50 51 53	F90384500 F92810000 F99513300 F97623000 F65200702 F93198000 F98226500 F90380500 F90190000 F10081155	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50 Ring, Rad. Ø 70x90x10 Pinion, Z28 R. 2.90, Helicol	4 2 16 8 2 1 1 2 2 2
44 45 46 47 48 49 50 51	F90384500 F92810000 F99513300 F97623000 F65200702 F93198000 F98226500 F90380500 F90190000 F10081155 F10081255	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50 Ring, Rad. Ø 70x90x10 Pinion, Z28 R. 2.90, Helicol Pinion, Z24 R. 3.46, Helicol	4 2 16 8 2 1 1 2 2
44 45 46 47 48 49 50 51 53	F90384500 F92810000 F99513300 F99513300 F97623000 F65200702 F93198000 F98226500 F90392650 F90380500 F90190000 F10081155 F10081255 F10081355	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50 Ring, Rad. Ø 70x90x10 Pinion, Z28 R. 2.90, Helicol Pinion, Z24 R. 3.46, Helicol Pinion, Z21 R. 4.23, Helicol	4 2 16 8 2 1 1 2 2 2 2
44 45 46 47 48 49 50 51 53	F90384500 F92810000 F99513300 F99623000 F65200702 F93198000 F98226500 F90392650 F90380500 F90190000 F10081155 F10081255 F10081355 F98233950	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50 Ring, Rad. Ø 70x90x10 Pinion, Z28 R. 2.90, Helicol Pinion, Z24 R. 3.46, Helicol Pinion, Z21 R. 4.23, Helicol Oil Dipstick, 1"x275	4 2 16 8 2 1 1 2 2 2
44 45 46 47 48 49 50 51 53 54 55	F90384500 F92810000 F99513300 F99513300 F97623000 F65200702 F93198000 F98226500 F90392650 F90380500 F90190000 F10081155 F10081255 F10081355 F98233950 F65211120	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50 Ring, Rad. Ø 70x90x10 Pinion, Z28 R. 2.90, Helicol Pinion, Z24 R. 3.46, Helicol Pinion, Z21 R. 4.23, Helicol Oil Dipstick, 1"x275 Oil Dipstick	4 2 16 8 2 1 1 2 2 2 2
44 45 46 47 48 49 50 51 53 54 55 56	F90384500 F92810000 F99513300 F97623000 F955200702 F93198000 F98226500 F90392650 F90380500 F90190000 F10081155 F10081255 F10081355 F98233950 F65211120 F90389800	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50 Ring, Rad. Ø 70x90x10 Pinion, Z28 R. 2.90, Helicol Pinion, Z24 R. 3.46, Helicol Pinion, Z21 R. 4.23, Helicol Oil Dipstick, 1"x275 Oil Dipstick O-ring, Ø 56.82x2.62	4 2 16 8 2 1 1 2 2 2 2 2
44 45 46 47 48 49 50 51 53 54 55 56 57	F90384500 F92810000 F99513300 F97623000 F95200702 F93198000 F90392650 F90380500 F90190000 F10081155 F10081255 F10081355 F98233950 F65211120 F90389800 F79211689	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50 Ring, Rad. Ø 70x90x10 Pinion, Z28 R. 2.90, Helicol Pinion, Z24 R. 3.46, Helicol Pinion, Z21 R. 4.23, Helicol Oil Dipstick, 1"x275 Oil Dipstick O-ring, Ø 56.82x2.62 Bushing	4 2 16 8 2 1 1 2 2 2 2 1 1 1 1 2 4
44 45 46 47 48 49 50 51 53 54 55 56 57 58 59	F90384500 F92810000 F99513300 F97623000 F965200702 F93198000 F98226500 F90392650 F90380500 F90190000 F10081155 F10081255 F10081255 F98233950 F65211120 F90389800 F79211689 F91499500	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50 Ring, Rad. Ø 70x90x10 Pinion, Z28 R. 2.90, Helicol Pinion, Z24 R. 3.46, Helicol Pinion, Z21 R. 4.23, Helicol Oil Dipstick, 1"x275 Oil Dipstick O-ring, Ø 56.82x2.62 Bushing Key, 12x8x40	4 2 16 8 2 1 1 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1
44 45 46 47 48 49 50 51 53 54 55 56 57 58 59 60	F90384500 F92810000 F99513300 F97623000 F97623000 F98226500 F90392650 F90380500 F90190000 F10081155 F10081355 F10081355 F98233950 F65211120 F90389800 F79211689 F91499500 F79211907	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50 Ring, Rad. Ø 70x90x10 Pinion, Z28 R. 2.90, Helicol Pinion, Z24 R. 3.46, Helicol Pinion, Z21 R. 4.23, Helicol Oil Dipstick, 1"x275 Oil Dipstick O-ring, Ø 56.82x2.62 Bushing Key, 12x8x40 Oil Pump Rotor	4 2 16 8 2 1 1 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1
44 45 46 47 48 49 50 51 53 54 55 56 57 58 59 60 61	F90384500 F92810000 F99513300 F97623000 F65200702 F93198000 F98226500 F90392650 F90380500 F90190000 F10081155 F10081355 F10081355 F98233950 F65211120 F90389800 F79211689 F91499500 F79211907 F98215500	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50 Ring, Rad. Ø 70x90x10 Pinion, Z28 R. 2.90, Helicol Pinion, Z24 R. 3.46, Helicol Pinion, Z21 R. 4.23, Helicol Oil Dipstick, 1"x275 Oil Dipstick O-ring, Ø 56.82x2.62 Bushing Key, 12x8x40 Oil Pump Rotor Plug, Conical, M20x1.5	4 2 16 8 2 1 1 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1
44 45 46 47 48 49 50 51 53 54 55 56 57 58 59 60	F90384500 F92810000 F99513300 F97623000 F97623000 F98226500 F90392650 F90380500 F90190000 F10081155 F10081355 F10081355 F98233950 F65211120 F90389800 F79211689 F91499500 F79211907	O-ring, Ø 18.72x2.62 Clip, Ø 3 58-69 Screw, M16x35 Plug, Ø 10x24 Rear Pump Feet Washer, 3/4" Plug, 3/4"x16 O-ring, Ø 126.67x2.62 O-ring, Ø 132.00x2.50 Ring, Rad. Ø 70x90x10 Pinion, Z28 R. 2.90, Helicol Pinion, Z24 R. 3.46, Helicol Pinion, Z21 R. 4.23, Helicol Oil Dipstick, 1"x275 Oil Dipstick O-ring, Ø 56.82x2.62 Bushing Key, 12x8x40 Oil Pump Rotor	4 2 16 8 2 1 1 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1

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Item	Part #	Description	QTY.
64	F65213864	Fitting, Oil Filter Exchanger	1
	F92899000	Oil Filter, M20	1
	F36200951	Inlet Valve Guide	4
67	F94744000	Spring,15.4x26.5	4
68	F36201076	Valve, Spherical	4
69 70	90386500 F90387300	O-ring, Ø 29.82x2.62 O-ring, Ø 36.14x2.62	4
71	F79213964	Valve Cage	4
72	F98213780	Plug, M18x11	1
73	F96741000	Washer, Ø 18.2x24x1.5	1
74	F94739000	Spring, 10.8x37.9	1
75	F79213664	Piston Valve, H.P.	1
76	F99303900	Screw, M8x16	4
77	F79212654	Control, Oil Pump	1
78	F99185100	Screw, M6x16	3
79	F79212747	Oil Seal, Oil Pump	1
80	F79212874	Plate, Oil Pump	1
81	F79212984	Seal, Oil Pump Plate	1
82	F99368600	Screw, M10x30	12
83	F99311600	Screw, M8x40	15
84	F93510500	High Temperature Light	1
85	F93551500	Connector, High Temperature Light	1
86	F79213589	Bushing, Oil Pump	2
87	F93555500	Pressure Switch, 12V Connector, M-F, 1/4"-M10x1	1
88 89	F94513100 F96723000	Washer, Ø 13.5x19x1.5	3
90	F95256000	Connector, M-M, NPT 1/4"-G1/4"	1
91	F96310000	Connector, T, F-F-F, G1/4"	1
92	F95256600	Nipple, M-F, G1/4"	1
93	F94607000	Pressure Gauge	1
94	F91505000	Key, 18x11x100	1
95	F99441000	Screw, Connecting Rod	6
96	F90918500	Bushing, Connecting Rod	3
97	F99301900	Screw, M8x10	3
98	F99301900	Screw, M8x10	1
99	F96701750	Washer, Ø8.4x15x0.8	1
	F99365200	Screw, M10x20	3
	F65700501	Cover, Pinion, PTP	2
102	F90359600	O-ring, Ø 18.77x1.78	3
	F65041601	Plunger, complete Ø 26	
103	F65041701	Plunger, complete Ø 30	3
	F65041801 F65041901	Plunger, complete Ø 32	
	F90078000	Plunger, complete Ø 36 Restop Ring, SR26, 30, 32	
104	90079700	Restop Ring, SR36	3
	F78211656	Packing, Ø 26	
	F78211856	Packing, Ø 30	1
105	F65217056	Packing, Ø 32	3
	F65217156	Packing, Ø 36	1
106	F99216100	Screw, M8x100	54
	F90274920	Packing, Ø 26x34x8.0, LP	
107	F90276300	Packing, Ø 30x38x6.0, LP, LP	3
107	F90278100	Packing, Ø 32x40x6.0, LP	3
	F90280100	Packing, Ø 36x44x8.0, LP	
	F90414600	O-ring, Ø 4x3.53	3
109	F90414700	O-ring, Ø107.5x3.53	3
	F65216656	Support Seal, Ø 26, LP	
110	F65216756	Support Seal, Ø 30, LP	3
	F65216856	Support Seal, Ø 32, LP	
	F65216956	Support Seal, Ø 36, LP	
111	F90389300 F90390000	O-ring, Ø53.65x2.62, SR26, 30, 32 O-ring, Ø56.42x2.62, SR36	3
	F65216060	Bushing Seal, Ø 26	
	F78213660	Bushing Seal, Ø 30	
112	F65216160	Bushing Seal, Ø 32	3
	F65216260	Bushing Seal, Ø 36	
	F65215768	Anti-extrusion Ring, Ø 26	
	F78213068	Anti-extrusion Ring, Ø 30	
113	F65215868	Anti-extrusion Ring, Ø 32	3
	F65215968	Anti-extrusion Ring, Ø 30	1
	F90274930	Packing, Ø 26x40x16.5, HP	
	F90277800	Packing, Ø 30x46x17.8, HP	
114	F90278900	Packing, Ø 32x46x16.4, HP	3
	F90282500	Packing, Ø 36x52x18.4, HP	1
		J	1

SR26/30/32/36-Vertical

Item	Part #	Description	QTY.
	F65215360	Head Ring, Ø 26	
115	F65215460	Head Ring, Ø 30	3
115	F65215560	Head Ring, Ø 32	3
	F65215660	Head Ring, Ø 36	
	F65216356	Support Seal, Ø 26, HP	
116	F65216456	Support Seal, Ø 30, 32, LP	3
	F65216556	Support Seal, Ø 36, LP	
	F65214982	Plunger Bushing, Ø 26	
117	F65215082	Plunger Bushing, Ø 30	3
117	F65215182	Plunger Bushing, Ø 32	3
	F65218282	Plunger Bushing, Ø 30	
	F93198760	Seal, Ø 40x45x3.95, SR26	
118	F93198950	Seal, Ø 46x51x3.95, SR30, 32	6
	F93199800	Seal, Ø 52x57x3.95, SR36	
	F65061056	Piston Sleeve, Ø 26	
119	F65061156	Piston Sleeve, Ø 30, 32	3
	F65061256	Piston Sleeve, Ø 36	
120	F90391450	O-ring, Ø 75.87x2.62	3
	F94767000	Spring, 36x51.7, SR26	
121	F94770800	Spring, 41.5x51.2, SR30, 32	3
	F94772300	Spring, 47.2x61.2, SR36	
	F36214556	Plate Valve, Ø 26	
122	F36214656	Plate Valve, Ø 30, 32	3
	F26214756	Plate Valve, Ø 36	
	F36214356	Valve Seat, Ø 26	
123	F36214256	Valve Seat, Ø 30, 32	3
	F36214456	Valve Seat, Ø 36	
124	F93198730	Seal, Ø 36x41x3.95	

Item	Part #	Description	QTY.
125	F36208356	Valve Ø 20-22-24, SR26, 30, 32	3
F3620	F36208456	Valve, Ø 26-28-30, SR36	3
126	F94747600	Spring, 18.0x35, SR26, 30, 32	3
120	F94748900	Spring, 18.9x35, SR36	3
127	F36214160	Valve guide	3
128	F96416400	Fitting, 90°, G3/8	1
129	F78214566	Fitting, Ø 3-3/8Mx3/8F	1
130	F96738000	Washer, Ø 17.5x23x1.5	2
131	F99433500	Screw, M12x50.59	4
132	F65120756	Manifold	1
133	F97827600	Label	1
134	F91570300	Rivet, Ø 2.5x8	2
135	F99449000	Screw, M12x160	24
136	F99537100	Screw, M24x2x300	4
137	F90382101	O-ring, Ø 9.19x2.62	2
138	F98208600	Plug, G3/8x12	1
139	F65214713	Manifold spacer, HP, SR	1
140	F65210666	Flap for Bellows	

REPAIR KITS

KIT NUMBER	F2323 Plunger Packing Kit SR26	F2324 Plunger Packing Kit SR30	F2325 Plunger Packing Kit SR32	F2326 Plunger Packing Kit SR36
Positions	106, 107, 108, 110, 111,	106, 107, 108, 110, 111,	106, 107, 108, 110, 111,	106, 107, 108, 110, 111,
Included	112, 113, 117, 119, 136	112, 113, 117, 119, 136	112, 113, 117, 119, 136	112, 113, 117, 119, 136

KIT NUMBER	F2327 Valve Kit SR26	F2335 Valve Kit SR30 & SR32	F2336 Valve Kit SR36
Positions Included	117, 119, 123	117, 119, 123	117, 119, 123

KIT NUMBER	F2328 Inlet/Outlet Valve Kit SR26	F2329 Inlet/Outlet Valve Kit SR30 & SR32	F2330 Inlet/Outlet Valve Kit SR36
Positions	117, 119, 120, 121,	117, 119, 120, 121, 122,	117, 119, 120, 121,
Included	122, 123, 124, 125, 126	123, 124, 125, 126	122, 123, 124, 125, 126

	KIT NUMBER	F2331 Complete Seals Kit SR26	F2332 Complete Seals Kit SR30	F2333 Complete Seals Kit SR32	F2334 Complete Seals Kit SR36
Ī		13, 30, 35, 37, 41, 50, 51, 53,	13, 30, 35, 37, 41, 50, 51, 53,	13, 30, 35, 37, 41, 50, 51, 53,	13, 30, 35, 37, 41, 50, 51, 53,
	Positions	57, 62, 69, 70, 79, 81, 101, 106,	57, 62, 69, 70, 79, 81, 101,	57, 62, 69, 70, 79, 81, 101,	57, 62, 69, 70, 79, 81, 101,
	Included	107, 108, 110, 111, 112, 113,	106, 107, 108, 110, 111, 112,	106, 107, 108, 110, 111, 112,	106, 107, 108, 110, 111, 112,
L		117, 119, 123, 136	113, 117, 119, 123, 136	113, 117, 119, 123, 136	113, 117, 119, 123, 136

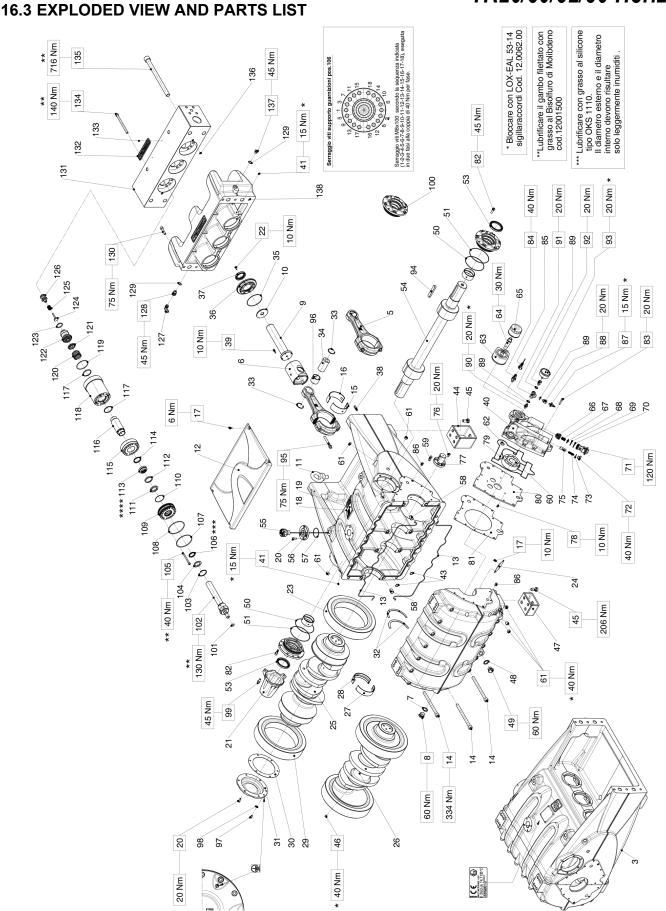
KIT NUMBER	F2265 Shaft Bushing Kit (Standard)	F2266 Shaft Bushing Kit (+0.25)	F2267 Shaft Bushing Kit (+0.50)
Positions Included	27, 28, 32	27, 28, 32	27, 28, 32

KIT NUMBER	F2186 Connecting Rod Bushing Kit (Standard)	F2187 Connecting Rod Bushing Kit (+0.25)	F2188 Connecting Rod Bushing Kit (+0.50)
Positions Included	15, 16	15, 16	15, 16

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TR26/30/32/36-Horizontal

TR26/30/32/36 HORIZONTAL



TR26/30/32/36 Horizontal

Item	Part #	Description	QTY.
3	F65010901	Crankcase	1
5	F65030601 F79050043	Connecting Rod Piston Guide	3
6	F79050243	Piston Guide. ± 1.0	3
7	F93198000	Washer, Seal, Ø 3/4"	1
8	F98226500	Plug, G 3/4" x16	1
9	F65050666	Piston Guide Stem	3
10	F65210566	Splashguard	3
11	F93108000	Eyebolt	3
12 13	F65150753 F65214082	Upper Crankcase Cover	1 2
14	F99522400	Seal, Ø 3.53x530 Screw, M16x200	22
14	F90932300	Upper Babbitt	
15	F90932400	Upper babbitt, +0.25	3
	F90932500	Upper babbitt, +0.50	
	F90932000	Lower Babbitt	
16	F90932100	Lower Babbitt, +0.25	3
	F90932200	Lower Babbitt, +0.50	
17	F99182000	Screw, M6x12	8
18 19	F91570000 F97826800	Rivet, Ø 2.5x5 Pump Plate	1
20	F99305900	Screw. M8x20	10
21	F65150920	Crankshaft End Cover	10
22	F99185300	Screw, M6x16	6
	F10081555	Gear, SX Z81 R 2.90, Helical	
23	F10081755	Gear, SX Z83 R 3.46, Helical	1
	F10081955	Gear, SX Z89 R 4.23, Helical	
24	F65210874	Oil Filter	1
25	F65020555	Crankshaft Elbow	1
26	F65021001	Bearing, C: 90, R: 2.90	
26	F65021101 F65021201	Bearing, C: 90, R:3.46 Bearing, C: 90, R:4.23	1
	F90935000	Upper Bushing	
27	F90935100	Upper Bushing, +0.254	4
	F90935200	Upper Bushing, +0.5.8	
	F90934700	Lower Bushing	
28	F90934800	Lower Bushing, +0.254	4
	F90934900	Lower Bushing, +0.508	
	F10081455	Gear, DX Z81 R 2.90, Helical	
29	F10081655	Gear, DX Z83 R. 3.43, Helical Gear, DX Z89 R. 4.23, Helical	1
30	F10081855 F65210984	Front Cover Seal	1
31	F65150620	Crankshaft Cover	1
32	F90935300	Half ring	2
33	F90075500	Ring, Seeger, Ø 45	6
34	F97747000	Pin, Ø 45x86	3
35	F90392000	O-ring, Pin, Ø 101.27x2.62	3
36	F79210022	Piston Guide Seal Cover	3
37	F90171500	Ring, Rad, Ø 50x70x10/11.5	3
38 39	F97630000 F99189700	Pin, Ø 12x40 Screw, M6x24	12
40	F79212420	Pump Oil Body	1
41	F98193000	Plug, Conical, M8x1	2
43	F90384500	O-ring, Ø 18.72x2.62	4
44	F65200602	Front Pump Feet	2
45	F99513300	Screw, M16x35	16
46	F99425000	Screw, M12x12	2
47	F65200502	Rear Pump Feet	2
48	F93198000	Washer, 3/4" Plug. 3/4"x16	1
49 50	F98226500 F90392650	O-ring, Ø 126.67x2.62	1 2
51	F90380500	O-ring, Ø 132.00x2.50	2
53	F90190000	Ring, Rad. Ø 70x90x10	2
	F10081155	Pinion, Z28 R. 2.90, Helicol	
54	F10081255	Pinion, Z24 R. 3.46, Helicol	1
	F10081355	Pinion, Z21 R. 4.23, Helicol	
55	F98234050	Oil Dipstick, 1"x343	1
56	F65211254	Oil Dipstick Support	1
57	F90389800	O-ring, Ø 56.82x2.62	1
58	F79211689	Bushing	4
59	F91499500	Key, 12x8x40	1
60	F79211907	Oil Pump Rotor	1
61	F98215500	Plug, Conical, M20x1.5	6
62	F90385200	O-ring, Ø 22.22x2.62	6
63	F65213700	Exchanger, Water-Oil	1

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Item	Part #	Description	QTY.
	F65213864	Fitting, Oil Filter Exchanger	1
	F92899000	Oil Filter, M20	1
	F36200951	Inlet Valve Guide	4
67 68	F94744000 F36201076	Spring,15.4x26.5 Valve, Spherical	4
	90386500	O-ring, Ø 29.82x2.62	4
	F90387300	O-ring, Ø 36.14x2.62	4
	F79213964	Valve Cage	4
72	F98213780	Plug, M18x11	1
	F96741000	Washer, Ø 18.2x24x1.5	1
	F94739000	Spring, 10.8x37.9	1
	F79213664	Piston Valve, H.P.	1
	F99303900 F79212654	Screw, M8x16 Control, Oil Pump	1
-	F99185100	Screw, M6x16	3
	F79212747	Oil Seal, Oil Pump	1
	F79212874	Plate, Oil Pump	1
81	F79212984	Seal, Oil Pump Plate	1
	F99368600	Screw, M10x30	12
	F99311600	Screw, M8x40	15
	F93510500	High Temperature Light	1
	F93551500	Connector, High Temperature Light Bushing, Oil Pump	2
	F79213589 F93555500	Pressure Switch, 12V	1
	F94513100	Connector, M-F, 1/4"-M10x1	1
	F96723000	Washer, Ø 13.5x19x1.5	3
	F95256000	Connector, M-M, NPT 1/4"-G1/4"	1
91	F96310000	Connector, T, F-F-F, G1/4"	1
	F95256600	Nipple, M-F, G1/4"	1
	F94607000	Pressure Gauge	1
_	F91505000	Key, 18x11x100	1
	F99441000 F90918500	Screw, Connecting Rod Bushing, Connecting Rod	6
	F99301900	Screw, M8x10	3
	F96701750	Washer, Ø8.4x15x0.8	1
	F99365200	Screw, M10x20	3
100	F65700501	Cover, Pinion, PTP	2
101	F90359600	O-ring, Ø 18.77x1.78	3
	F65042801	Plunger, complete Ø 26	
102	F65042901	Plunger, complete Ø 30	3
	F65043001	Plunger, complete Ø 32	
	F65043101 F90078000	Plunger, complete Ø 36 Restop Ring, SR26, 30, 32	
103	90079700	Restop Ring, SR36	3
	F78211656	Packing, Ø 26	
404	F78211856	Packing, Ø 30	
104	F65217056	Packing, Ø 32	3
	F65217156	Packing, Ø 36	
105	F99216100	Screw, M8x100	54
	F90274920	Packing, Ø 26x34x8.0, LP	
106	F90276300	Packing, Ø 30x38x6.0, LP, LP	3
	F90278100 F90280100	Packing, Ø 32x40x6.0, LP Packing, Ø 36x44x8.0, LP	
107	F90280100 F90414600	O-ring, Ø 4x3.53	3
	F90414700	O-ring, Ø107.5x3.53	3
	F65216656	Support Seal, Ø 26, LP	
109	F65216756	Support Seal, Ø 30, LP	3
109	F65216856	Support Seal, Ø 32, LP]
	F65216956	Support Seal, Ø 36, LP	
110	F90389300	O-ring, Ø53.65x2.62, SR26, 30, 32	3
	F90390000	O-ring, Ø56.42x2.62, SR36	
	F65216060	Bushing Seal, Ø 26	
111	F78213660 F65216160	Bushing Seal, Ø 30 Bushing Seal, Ø 32	3
	F65216260	Bushing Seal, Ø 36	
	F65215768	Anti-extrusion Ring, Ø 26	\vdash
440	F78213068	Anti-extrusion Ring, Ø 30	
112	F65215868	Anti-extrusion Ring, Ø 32	3
	F65215968	Anti-extrusion Ring, Ø 30	1
	F90274930	Packing, Ø 26x40x16.5, HP	
113	F90277800	Packing, Ø 30x46x17.8, HP	3
113	F90278900	Packing, Ø 32x46x16.4, HP	ا ا ا
	F90282500	Packing, Ø 36x52x18.4, HP	

TR26/30/32/36-Horizontal

Item	Part #	Description	QTY.
	F65215360	Head Ring, Ø 26	
114	F65215460	Head Ring, Ø 30	3
114	F65215560	Head Ring, Ø 32	3
	F65215660	Head Ring, Ø 36	
	F65216356	Support Seal, Ø 26, HP	
115	F65216456	Support Seal, Ø 30, 32, LP	3
	F65216556	Support Seal, Ø 36, LP	
	F65217282	Plunger Bushing, Ø 26	
116	F65217382	Plunger Bushing, Ø 30	3
110	F65217482	Plunger Bushing, Ø 32	3
	F65217582	Plunger Bushing, Ø 30	
	F93198760	Seal, Ø 40x45x3.95, SR26	
117	F93198950	Seal, Ø 46x51x3.95, SR30, 32	6
	F93199800	Seal, Ø 52x57x3.95, SR36	
	F65061356	Piston Sleeve, Ø 26	
118	F65061456	Piston Sleeve, Ø 30, 32	3
	F65061556	Piston Sleeve, Ø 36	
119	F90391450	O-ring, Ø 75.87x2.62	3
	F94767000	Spring, 36x51.7, SR26	
120	F94770800	Spring, 41.5x51.2, SR30, 32	3
	F94772300	Spring, 47.2x61.2, SR36	
	F36214556	Plate Valve, Ø 26	
121	F36214656	Plate Valve, Ø 30, 32	3
	F26214756	Plate Valve, Ø 36	
	F36214356	Valve Seat, Ø 26	
122	F36214256	Valve Seat, Ø 30, 32	3
	F36214456	Valve Seat, Ø 36	
123	F93198730	Seal, Ø 36x41x3.95	

Item	Part #	Description	QTY.
124	F36208356	Valve Ø 20-22-24, SR26, 30, 32	- 3
124	F36208456	Valve, Ø 26-28-30, SR36	٦ °
125	F94747600	Spring, 18.0x35, SR26, 30, 32	3
125	F94748900	Spring, 18.9x35, SR36	_
126	F36214160	Valve guide	3
127	F96416400	Fitting, 90 ^o , G3/8	1
128	F78214566	Fitting, Ø 3-3/8Mx3/8F	1
129	F96738000	Washer, Ø 17.5x23x1.5	2
130	F99433500	Screw, M12x50.59	4
131	F65120756	Manifold	1
132	F97827600	Label	1
133	F91570300	Rivet, Ø 2.5x8	2
134	F99449000	Screw, M12x160	24
135	F99537200	Screw, M24x2x320	4
136	F90382101	O-ring, Ø 9.19x2.62	2
137	F98208600	Plug, G3/8x12	1
138	F65214713	Manifold spacer, HP, SR	1

REPAIR KITS

KIT NUMBER	F2323 Plunger Packing Kit TR26	F2324 Plunger Packing Kit TR30	F2325 Plunger Packing Kit TR32	F2326 Plunger Packing Kit TR36
Positions Included			106, 107, 108, 110, 111, 112, 113, 117, 119, 136	

KIT NUMBER	F2327 Valve Kit TR26	F2335 Valve Kit TR30 & SR32	F2336 Valve Kit TR36
Positions Included	117, 119, 123	117, 119, 123	117, 119, 123

KIT NUMBER	F2328 Inlet/Outlet Valve Kit TR26	F2329 Inlet/Outlet Valve Kit TR30 & SR32	F2330 Inlet/Outlet Valve Kit TR36
Positions	117, 119, 120, 121,	117, 119, 120, 121, 122,	117, 119, 120, 121,
Included	122, 123, 124, 125, 126	123, 124, 125, 126	122, 123, 124, 125, 126

	KIT NUMBER	F2331 Complete Seals Kit TR26	F2332 Complete Seals Kit TR30	F2333 Complete Seals Kit TR32	F2334 Complete Seals Kit TR36
		13, 30, 35, 37, 41, 50, 51, 53,		13, 30, 35, 37, 41, 50, 51, 53,	13, 30, 35, 37, 41, 50, 51, 53,
	Positions	57, 62, 69, 70, 79, 81, 101, 106,	57, 62, 69, 70, 79, 81, 101,	57, 62, 69, 70, 79, 81, 101,	57, 62, 69, 70, 79, 81, 101,
	Included	107, 108, 110, 111, 112, 113,	106, 107, 108, 110, 111, 112,	106, 107, 108, 110, 111, 112,	106, 107, 108, 110, 111, 112,
L		117, 119, 123, 136	113, 117, 119, 123, 136	113, 117, 119, 123, 136	113, 117, 119, 123, 136

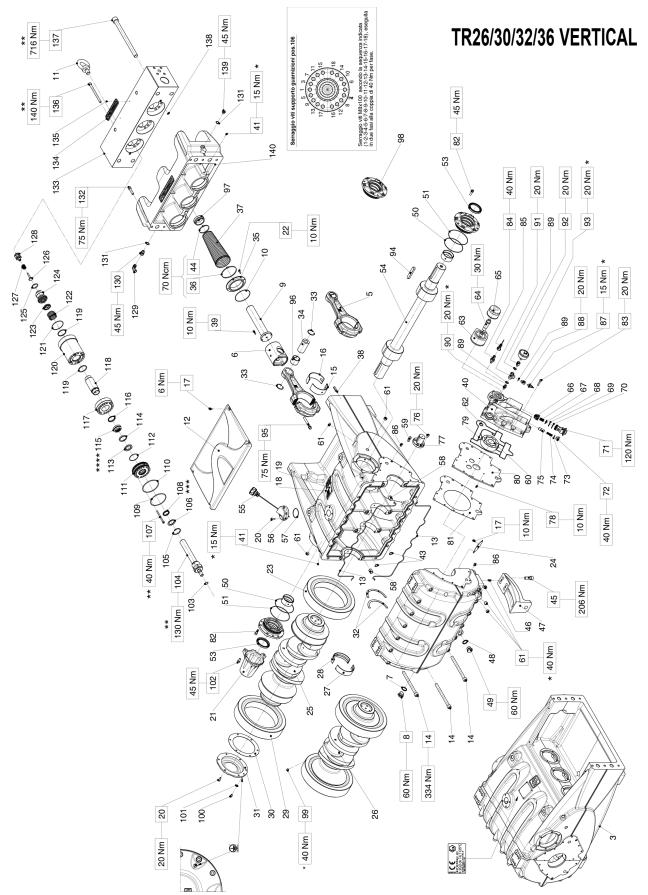
KIT NUMBER	F2265 Shaft Bushing Kit (Standard)	F2266 Shaft Bushing Kit (+0.25)	F2267 Shaft Bushing Kit (+0.50)
Positions Included	27, 28, 32	27, 28, 32	27, 28, 32

KIT NUMBER	F2186 Connecting Rod Bushing Kit (Standard)	F2187 Connecting Rod Bushing Kit (+0.25)	F2188 Connecting Rod Bushing Kit (+0.50)
Positions Included	15, 16	15, 16	15, 16

Ref 310054 Rev. A 07-17

TR26/30/32/36-Vertical

16.4 EXPLODED VIEW AND PARTS LIST



TR26/30/32/36 Vertical

3 F65010901 Crankcase 1 5 F65030601 Connecting Rod 3 6 F79050243 Piston Guide 3 7 F93198000 Piston Guide 4 1.0 3 7 F93198000 Piston Guide 4 1.0 3 7 F93198000 Piston Guide 5 7 7 7 7 7 7 7 7 7	Item	Part #	Description	QTY.
F79050043 Piston Guide ± 1.0 3 3 5 5 5 5 5 5 5 5			•	
F79050243 Piston Guide, ± 1.0 3 F79519900 Vasher, Seal, Ø 3¼" 1 8 F98226500 Plug, G 3¼" x16 1 9 F65050666 Piston Guide Stem 3 11 F993108000 Piston Guide Stem 3 12 F6515075 Upper Crankcase Cover 1 13 F65214082 Seal, Ø 3.53x530 2 14 F99522400 Screw, M16x200 222 F90932200 Upper Babbitt 0.5 F90932200 Upper Babbitt 0.5 F90932000 Lower Babbitt 0.5 F90932000 Lower Babbitt 0.5 F90932200 Lower Babbitt 0.5 F99932200 Lower Babbitt 0.5 F99932200 Lower Babbitt 0.5 F9993200 Screw, M6x12 8 18 F91570000 Rivet, Ø 2.5x5 4 19 F97826800 Screw, M6x12 8 18 F91570000 Rivet, Ø 2.5x5 4	5	F65030601	Connecting Rod	3
Fy090243	6	F79050043	Piston Guide	3
8 F98226500 Plug. G 3/4" x16 1 9 F65050666 Piston Guide Stem 3 10 F90322000 O-Ing. Ø 101.27x2.62 3 21 F65150753 Upper Crankcase Cover 1 13 F65214082 Seal. Ø 3.53x530 2 14 F99522400 Corew. M16x200 22 F90932300 Upper babbitt 0.56 F90932200 Upper babbitt, 40.25 3 F90932200 Lower Babbitt, 40.50 F99932201 Lower Babbitt, 40.50 F99932202 Lower Babbitt, 40.50 F99932200 Lower Babbitt, 40.50 F99932201 Lower Babbitt, 40.50 F99932200 Lower Babbitt, 40.50 17 F99182000 Screw, M6x12 8 18 F91570000 Rivet, Ø.2.5x5 4 19 F97826800 Screw, M8x20 10 21 F96150920 Crankshaft Eloc 1 21 F96150920 Screw, M8x26 1 22				
9 F66050666 Piston Guide Stem 3 10 F99330000 O-ing. Ø 101.27x2.62 3 3 11 F93108000 Eyebott 3 3 11 F93108000 Eyebott 3 3 F66519075 Seal. Ø 3.53x530 2 2 599325000 Upper Babbitt 0.25 F99932200 Upper Babbitt 0.50 F99932000 Upper Bushing 0.508 F90934000 Up				_
10 F991302000 Cyring, 0 101,27x,62 3 3 12 F95150753 Upper Crankcase Cover				
11 P93108000 Eyebolt 3 12 12 156150753 Upper Crankcase Cover 1 1 13 165214082 Seal. Ø 3.53x530 2 2 14 P99522400 Screw, M16x200 22 P90932300 Upper Babbitt 1 15 15 15 15 15 15 1				
12 F65150753 Upper Crankcase Cover				
13			· •	
14				
F90932400 Upper babbitt, +0.25 F90932500 Upper babbitt, +0.50 F90932000 Lower Babbitt F90932000 Lower Babbitt, +0.50 F90932000 Cower Babbitt, +0.50 F90932000 Cower Babbitt, +0.50 F90932000 Cower Babbitt, +0.50 F90932000 Cower Babbitt, +0.50 F9093200 Cower Babbitt, +0.50 F9093200 Cower M6x12 September F97826800 Pump Plate 1 F97926800 Pump Plate 1 F97926800 Pump Plate 1 F97926800 Pump Plate 1 F99936900 Screw, M6x16 F99936500 Screw, M6x16 F10081955 Gear, SX Z81 R 2.90, Helical 1 F99936700 F99935000 F99935100 Puper Bushing C: 90, R: 3.46 F65021001 Bearing, C: 90, R: 3.46 F65021201 Bearing, C: 90, R: 3.46 F65021201 Bearing, C: 90, R: 3.46 F9993500 Upper Bushing F9993500 Upper Bushing F9993500 Upper Bushing F9993500 Upper Bushing F99934700 Upper Bushing F99934800 Lower Bushing F99934800 F10081455 Gear, DX Z81 R 2.90, Helical F10081655 Gear, DX Z81 R 2.90, Helical F10081655 Gear, DX Z81 R 2.90, Helical F10081655 F99933900 F10081455 Gear, DX Z81 R 2.90, Helical F10081655 F9993300 F10081455 Gear, DX Z81 R 2.90, Helical F10081655 F9993000 F1008145 F10081655 F1008	14	F99522400		22
F90932500 Upper babbitt -0.50		F90932300	Upper Babbitt	
F90932000 Lower Babbitt + 0.25 F90932200 Lower Babbitt, + 0.50 F90932200 Lower Babbitt, + 0.50 F90932200 Lower Babbitt, + 0.50 F90932200 Screw, M6x12 8 F91570000 Rivet, Ø 2.5x5 4 4 7 F91570000 Rivet, Ø 2.5x5 Rivet, Ø 2.5x5	15			3
F90932100 Lower Babbitt, +0.25				
F90932200 Lower Babbitt +0.50	40			
17 F99182000 Screw, M6x12 8 8 F91570000 Rivet, Ø 2.5x5 4 4 F97826800 Pump Plate 1 1 1 1 1 1 1 1 1	16			3
18	17		,	Q
19 F97826800 Pump Plate 1 20 F99305900 Screw, M8x20 100				_
20			The state of the s	
21 F65150920 Crankshaft End Cover 1 1 22 F99185300 Screw, M6x16 6 6 F10081555 Gear, SX Z81 R 2.90, Helical 1 F10081555 Gear, SX Z83 R 3.46, Helical 1 F10081555 Gear, SX Z89 R 4.23, Helical 1 F05021074 Oil Filter 1 1 25 F65020655 Crankshaft Elbow 1 F650211001 Bearing, C: 90, R: 2.90 F65021201 Bearing, C: 90, R: 2.90 F65021201 Bearing, C: 90, R: 4.23 F99035000 Upper Bushing Upper Bushing F99035000 Upper Bushing, +0.5.8 F99034700 Upper Bushing, +0.5.8 F99034700 Lower Bushing, +0.508 F10081455 Gear, DX Z81 R 2.90, Helical F10081655 Gear, DX Z81 R 2.90, Helical F10081655 Gear, DX Z81 R 2.90, Helical F10081655 Gear, DX Z83 R 3.43, Helical 1 F65150620 Crankshaft Cover 1 3 F65210984 Front Cover Seal 1 F65210760 F10081656 F10081656 Gear, DX Z89 R 4.23, Helical 1 F65150620 F10081656 Gear, DX Z89 R 4.23, Helical 1 F65210766 F10081656 F10081656 F10081656 Gear, DX Z89 R 4.23, Helical 1 F65210984 F10081656 Gear, DX Z89 R 4.23, Helical 1 F65210984 F10081656 Gear, DX Z89 R 4.23, Helical 1 F10081656 F10			·	10
F10081555 Gear, SX Z81 R 2.90, Helical T1081755 Gear, SX Z83 R 3.46, Helical T1081755 Gear, SX Z89 R 4.23, Helical T1081755 Gear, Gr. S9, R: 2.90 T1081755 Gear, Gr. S9, R: 2.90 T1081755 Gear, Gr. S9, R: 2.90 T1081755 Gear, Gr. S9, R: 4.23 T1081755 Gear, Gr. S9, R: 4.23 T1081755 Gear, DX Z81 R 2.90, Helical T1081755 Gear, DX Z81 R 2.90, Helical T1081755 Gear, DX Z89 R. 4.23, Helical T1081755 T10817			,	
F10081755 Gear, SX Z83 R 3.46, Helical 1 1 10081955 Gear, SX Z89 R 4.23, Helical 1 1 1 1 1 1 1 1 1				6
F10081955 Gear, SX Z89 R 4.23, Helical				
24 F65210874 Oil Filter	23		,	1
Test				
F65021001 Bearing, C: 90, R: 2.90 F65021201 Bearing, C: 90, R: 3.46 T65021201 Bearing, C: 90, R: 4.23 F90935000 Upper Bushing Upper Bushing F90935000 Upper Bushing, +0.254 F90935000 Upper Bushing, +0.254 F90934700 Lower Bushing Company Lower Bushing F90934900 Lower Bushing, +0.508 F90934900 Lower Bushing, +0.508 F10081455 Gear, DX Z81 R 2.90, Helical F10081655 Gear, DX Z83 R. 3.43, Helical F10081655 Gear, DX Z83 R. 3.43, Helical F10081655 Gear, DX Z89 R. 4.23, Helical F10081655 Gear, DX Z89 R. 4.23, Helical F10081656 Gear, DX Z89 R. 4.23, Helical F1008155 G10806				
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F65021201 Bearing, C: 90, R:4.23 F90935000 Upper Bushing F90935100 Upper Bushing, +0.254 F90935200 Upper Bushing, +0.5.8 F90934700 Lower Bushing, +0.254 F90934800 Lower Bushing, +0.254 F90934900 Lower Bushing, +0.508 F10081455 Gear, DX Z81 R 2.90, Helical F10081855 Gear, DX Z83 R. 3.43, Helical F10081855 Gear, DX Z83 R. 3.43, Helical F10081855 Gear, DX Z89 R. 4.23, Helical G65210984 Front Cover Seal 1 F65150620 Crankshaft Cover 1 Z65210984 F10081855 Gear, DX Z89 R. 4.23, Helical G65210984 F10081855 Gear, DX Z89 R. 4.23, Helical G790935300 Half ring 2 Z65210766 F10081855 Gear, DX Z89 R. 4.23, Helical Z65210766 F10081855 Gear, DX Z89 R. 4.23, Helical G79075500 F10, Ø 45x86 3 Z65210766 F10081854 F10081855 F10081855 F10081855 F10081855 F10081255 F10081255	26			1
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27 F90935100 Upper Bushing, +0.254 F90933200 Upper Bushing, +0.5.8 F90934700 Lower Bushing, +0.254 F90934900 Lower Bushing, +0.508 F10081455 Gear, DX Z81 R 2.90, Helical F10081855 Gear, DX Z89 R. 4.23, Helical 30 F65210984 Front Cover Seal 31 F65150620 Crankshaft Cover 32 F90935300 Half ring 33 F90075500 Ring, Seeger, Ø 45 34 F97747000 Pin, Ø 45x86 33 F90875500 Ring, Seeger, Ø 45 34 F97747000 Pin, Ø 45x86 33 F90075500 Ring, Seeger, Ø 45 34 F97747000 Pin, Ø 45x86 33 F965210766 Flange for Bellows 35 F65210766 Flange for Bellows 38 F97630000 Plug, Ø 12x40 38 F97630000 Plug, Ø 12x40 39 F99189700 Screw, M6x24 12 40 F79212420 Pump Oil Body <t< td=""><td></td><td></td><td></td><td></td></t<>				
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28 F90934800 Lower Bushing, +0.508 F90934900 Lower Bushing, +0.508 PF0081455 Gear, DX Z81 R 2.90, Helical 29 F10081655 Gear, DX Z83 R. 3.43, Helical 1 30 F65210984 Front Cover Seal 1 31 F65150620 Crankshaft Cover 1 32 F99035300 Half ring 2 33 F9035300 Half ring 2 34 F97747000 Pin, Ø 45x86 3 35 F65210766 Flange for Bellows 3 36 F92811000 Clip, Ø 98-109 3 37 F65210746 Bellows 3 38 F97630000 Plug, Ø 12x40 3 39 F99189700 Screw, M6x24 12 40 F79212420 Pump Oil Body 1 41 F98189300 Plug, Ø 10x24 2 43 F90384500 O-ring, Ø 18.72x2.62 4 44 F92810000 Clip, Ø 358-69 2		F90935200		1
F90934900 Lower Bushing, +0.508 F10081455 Gear, DX Z81 R 2.90, Helical F10081655 Gear, DX Z83 R. 3.43, Helical F10081855 Gear, DX Z89 R. 4.23, Helical 30 F65210984 Front Cover Seal 31 F65150620 Crankshaft Cover 32 F90935300 Half ring 33 F90075500 Ring, Seeger, Ø 45 34 F97747000 Pin, Ø 45x86 35 F65210766 Flange for Bellows 36 F92811000 Clip, Ø 98-109 37 F65211047 Bellows 38 F97630000 Plug, Ø 12x40 39 F99189700 Screw, M6x24 40 F79212420 Pump Oil Body 41 F98193000 Plug, Conical, M8x1 24 F92810000 Clip, Ø 3 58-69 45 F99813300 Screw, M16x35 46 F97623000 Plug, Ø 10x24 47 F65200702 Rear Pump Feet 48 F93198000 Washer, 3/4" 49 F98226500 Plug, 3/4"x16 50 F90392650 O-ring, Ø 126.67x2.62 51 F90380500 O-ring, Ø 132.00x2.50 52 F90190000 Ring, Rad. Ø 70x90x10 55 F98233950 Oil Dipstick 57 F90389800 O-ring, Ø 22 R. 2.90, Helicol 55 F98233950 Oil Dipstick 57 F90389800 O-ring, Ø 56.82x2.62 51 F90385200 O-ring, Ø 56.82x2.62		F90934700	Lower Bushing	
F10081455 Gear, DX Z81 R 2.90, Helical F10081655 Gear, DX Z83 R. 3.43, Helical F10081655 Gear, DX Z89 R. 4.23, Helical F10081655 Gear, DX Z89 R. 4.23, Helical S1 F65210984 Front Cover Seal 1	28		Lower Bushing, +0.254	4
29 F10081655 Gear, DX Z83 R. 3.43, Helical F10081855 Gear, DX Z89 R. 4.23, Helical 30 F65210984 Front Cover Seal 1 31 F65150620 Crankshaft Cover 1 32 F90935300 Half ring 2 33 F90075500 Ring, Seeger, Ø 45 6 34 F97747000 Pin, Ø 45x86 3 35 F65210766 Flange for Bellows 3 36 F92811000 Clip, Ø 98-109 3 37 F65211047 Bellows 3 38 F97630000 Plug, Ø 12x40 3 39 F99189700 Screw, M6x24 12 40 F79212420 Pump Oil Body 1 41 F98193000 Plug, Conical, M8x1 2 43 F90384500 O-ring, Ø 18.72x2.62 4 44 F92810000 Clip, Ø 3 58-69 2 45 F99513300 Screw, M16x35 16 46 F97623000 Plug, Ø 10x24 8 47 F65200702 Rear Pump Feet				
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31 F65150620 Crankshaft Cover 1 32 F90935300 Half ring 2 33 F90075500 Ring, Seeger, Ø 45 6 34 F97747000 Pin, Ø 45x86 3 35 F65210766 Flange for Bellows 3 36 F92811000 Clip, Ø 98-109 3 37 F65211047 Bellows 3 38 F97630000 Plug, Ø 12x40 3 39 F99189700 Screw, M6x24 12 40 F79212420 Pump Oil Body 1 41 F98193000 Plug, Conical, M8x1 2 43 F90384500 O-ring, Ø 18.72x2.62 4 44 F92810000 Clip, Ø 3 58-69 2 45 F99513300 Screw, M16x35 16 46 F97623000 Plug, Ø 10x24 8 47 F6520702 Rear Pump Feet 2 48 F93198000 Washer, 3/4" 1 49 F98226500 Plug, 3/4"x16 1 50 F90389500 O-ring, Ø	30			1
32 F90935300 Half ring 2 33 F90075500 Ring, Seeger, Ø 45 6 34 F97747000 Pin, Ø 45x86 3 35 F65210766 Flange for Bellows 3 36 F92811000 Clip, Ø 98-109 3 37 F65211047 Bellows 3 38 F97630000 Plug, Ø 12x40 3 39 F99189700 Screw, M6x24 12 40 F79212420 Pump Oil Body 1 41 F98193000 Plug, Conical, M8x1 2 43 F90384500 O-ring, Ø 18.72x2.62 4 44 F92810000 Clip, Ø 3 58-69 2 45 F99523300 Screw, M16x35 16 46 F97623000 Plug, Ø 10x24 8 47 F65200702 Rear Pump Feet 2 48 F93198000 Washer, 3/4" 1 49 F98226500 Plug, 3/4"x16 1 50 F90392650 O-ring, Ø 132.00x2.50 2 51 F90380500 O-ri				
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62 F90385200 O-ring, Ø 22.22x2.62 6			·	

Item	Part #	Description	QTY.
64	F65213864	Fitting, Oil Filter Exchanger	1
65	F92899000	Oil Filter, M20	1
66	F36200951	Inlet Valve Guide	4
67	F94744000	Spring,15.4x26.5	4
68	F36201076	Valve, Spherical	4
69	90386500	O-ring, Ø 29.82x2.62	4
70	F90387300	O-ring, Ø 36.14x2.62	4
71	F79213964	Valve Cage	4
72	F98213780	Plug, M18x11	1
73	F96741000	Washer, Ø 18.2x24x1.5	1
74	F94739000	Spring, 10.8x37.9	1
75	F79213664	Piston Valve, H.P.	1
76	F99303900	Screw, M8x16	4
77	F79212654	Control, Oil Pump	1
78	F99185100	Screw, M6x16	3
79	F79212747	Oil Seal, Oil Pump	1
80	F79212874	Plate, Oil Pump	1
81	F79212984	Seal, Oil Pump Plate	1
82	F99368600	Screw, M10x30	12
83	F99311600	Screw, M8x40	15
84	F93510500	High Temperature Light	1
85	F93551500	Connector, High Temperature Light	1
86	F79213589	Bushing, Oil Pump	2
87	F93555500	Pressure Switch, 12V	1
88	F94513100	Connector, M-F, 1/4"-M10x1	1
89	F96723000	Washer, Ø 13.5x19x1.5	3
90	F95256000	Connector, M-M, NPT 1/4"-G1/4"	1
91	F96310000	Connector, T, F-F-F, G1/4"	1
92	F95256600	Nipple, M-F, G1/4"	1
93	F94607000	Pressure Gauge	1
94	F91505000	Key, 18x11x100	1
95	F99441000	Screw, Connecting Rod	6
	F90918500	Bushing, Connecting Rod	3
97	F65210666	Flap for Bellows	3
98	F65700501	Cover, Pinion, PTP	2
	F99425000	Screw, M12x12	2
	F99301900	Screw, M8x10	1
	F96701750	Washer, Ø8.4x15x0.8	1
	F99365200	Screw, M10x20	3
103	F90359600	O-ring, Ø 18.77x1.78	3
	F65042801	Plunger, complete Ø 26	
104	F65042901	Plunger, complete Ø 30	3
10-	F65043001	Plunger, complete Ø 32	
	F65043101	Plunger, complete Ø 36	
105	F90078000	Restop Ring, SR26, 30, 32	3
100	90079700	Restop Ring, SR36	
	F78211656	Packing, Ø 26	
106	F78211856	Packing, Ø 30	3
100	F65217056	Packing, Ø 32	
	F65217156	Packing, Ø 36	
107	F99326100	Screw, M8x100	54
	F90274920	Packing, Ø 26x34x8.0, LP	
108	F90276300	Packing, Ø 30x38x6.0, LP, LP	3
100	F90278100	Packing, Ø 32x40x6.0, LP	
	F90280100	Packing, Ø 36x44x8.0, LP	
109	F90414600	O-ring, Ø 4x3.53	3
110	F90414700	O-ring, Ø107.5x3.53	3
	F65216656	Support Seal, Ø 26, LP	
111	F65216756	Support Seal, Ø 30, LP	3
111	F65216856	Support Seal, Ø 32, LP	3
	F65216956	Support Seal, Ø 36, LP	
112	F90389300	O-ring, Ø53.65x2.62, SR26, 30, 32	3
112	F90390000	O-ring, Ø56.42x2.62, SR36	
	F65216060	Bushing Seal, Ø 26	
112	F78213660	Bushing Seal, Ø 30	,
113	F65216160	Bushing Seal, Ø 32	3
	F65216260	Bushing Seal, Ø 36	
	F65215768	Anti-extrusion Ring, Ø 26	
	F78213068	Anti-extrusion Ring, Ø 30]
114	F65215868	Anti-extrusion Ring, Ø 32	3
	F65215968	Anti-extrusion Ring, Ø 30	
	11 002 10500		$\overline{}$
		Packing Ø 26x40x16.5 HP	
	F90274930	Packing, Ø 26x40x16.5, HP Packing, Ø 30x46x17.8, HP	
115	F90274930 F90277800	Packing, Ø 30x46x17.8, HP	3
115	F90274930		3

TR26/30/32/36-Vertical

Item	Part #	Description	QTY.
	F65215360	Head Ring, Ø 26	
116	F65215460	Head Ring, Ø 30	3
110	F65215560	Head Ring, Ø 32	
	F65215660	Head Ring, Ø 36	
	F65216356	Support Seal, Ø 26, HP	
117	F65216456	Support Seal, Ø 30, 32, LP	3
	F65216556	Support Seal, Ø 36, LP	
	F65217282	Plunger Bushing, Ø 26	
118	F65217382	Plunger Bushing, Ø 30	3
110	F65217482	Plunger Bushing, Ø 32	3
	F65217582	Plunger Bushing, Ø 30	
	F93198760	Seal, Ø 40x45x3.95, SR26	
119	F93198950	Seal, Ø 46x51x3.95, SR30, 32	6
	F93199800	Seal, Ø 52x57x3.95, SR36	
	F65061356	Piston Sleeve, Ø 26	
120	F65061456	Piston Sleeve, Ø 30, 32	3
	F65061556	Piston Sleeve, Ø 36	
121	F90391450	O-ring, Ø 75.87x2.62	3
	F94767000	Spring, 36x51.7, SR26	
122	F94770800	Spring, 41.5x51.2, SR30, 32	3
	F94772300	Spring, 47.2x61.2, SR36	
	F36214556	Plate Valve, Ø 26	
123	F36214656	Plate Valve, Ø 30, 32	3
	F26214756	Plate Valve, Ø 36	
	F36214356	Valve Seat, Ø 26	
124	F36214256	Valve Seat, Ø 30, 32	3
	F36214456	Valve Seat, Ø 36	
125	F93198730	Seal, Ø 36x41x3.95	

Item	Part #	Description	QTY.
126	F36208356	Valve Ø 20-22-24, SR26, 30, 32	- 3
120	F36208456	Valve, Ø 26-28-30, SR36] ³
127	F94747600	Spring, 18.0x35, SR26, 30, 32	- 3
127	F94748900	Spring, 18.9x35, SR36	_
128	F36214160	Valve guide	3
129	F96416400	Fitting, 90°, G3/8	1
130	F78214566	Fitting, Ø 3-3/8Mx3/8F	1
131	F96738000	Washer, Ø 17.5x23x1.5	2
132	F99433500	Screw, M12x50.59	4
133	F65120756	Manifold	1
134	F97827600	Label	1
135	F91570300	Rivet, Ø 2.5x8	2
136	F99449000	Screw, M12x160	24
137	F99537200	Screw, M24x2x300	4
138	F90382101	O-ring, Ø 9.19x2.62	2
139	F98208600	Plug, G3/8x12	1
140	F65214713	Manifold spacer, HP, SR	1

REPAIR KITS

KIT NUMBER	F2323 Plunger Packing Kit TR26	F2324 Plunger Packing Kit TR30	F2325 Plunger Packing Kit TR32	F2326 Plunger Packing Kit TR36
Positions Included			106, 107, 108, 110, 111, 112, 113, 117, 119, 136	

KIT NUMBER	F2327 Valve Kit TR26	F2335 Valve Kit TR30 & TR32	F2336 Valve Kit TR36	
Positions Included	117, 119, 123	117, 119, 123	117, 119, 123	

KIT NUMBER	F2328 Inlet/Outlet Valve Kit TR26	F2329 Inlet/Outlet Valve Kit TR30 & TR32	F2330 Inlet/Outlet Valve Kit TR36	
Positions Included	117, 119, 120, 121, 122, 123, 124, 125, 126	117, 119, 120, 121, 122, 123, 124, 125, 126	117, 119, 120, 121, 122, 123, 124, 125, 126	

KIT NUMBER	F2331 Complete Seals Kit TR26	F2332 Complete Seals Kit TR30	F2333 Complete Seals Kit TR32	F2334 Complete Seals Kit TR36
Positions	13, 30, 35, 37, 41, 50, 51, 53, 57, 62, 69, 70, 79, 81, 101, 106,		13, 30, 35, 37, 41, 50, 51, 53, 57, 62, 69, 70, 79, 81, 101,	13, 30, 35, 37, 41, 50, 51, 53, 57, 62, 69, 70, 79, 81, 101,
Included	107, 108, 110, 111, 112, 113, 117, 119, 123, 136	106, 107, 108, 110, 111, 112, 113, 117, 119, 123, 136	106, 107, 108, 110, 111, 112, 113, 117, 119, 123, 136	106, 107, 108, 110, 111, 112, 113, 117, 119, 123, 136

KIT F2265 NUMBER Shaft Bushing Kit (Standard)		F2266 Shaft Bushing Kit (+0.25)	F2267 Shaft Bushing Kit (+0.50)	
Positions Included	27, 28, 32	27, 28, 32	27, 28, 32	

KIT NUMBER	F2186 Connecting Rod Bushing Kit (Standard)	F2187 Connecting Rod Bushing Kit (+0.25)	F2188 Connecting Rod Bushing Kit (+0.50)	
Positions Included	15, 16	15, 16	15, 16	

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18. MAINTENANCE LOG

HOURS & DATE

OIL CHANGE				
GREASE				
PACKING REPLACEMENT				
PLUNGER REPLACEMENT				
VALVE REPLACEMENT				



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